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CHINESE SECURITY INTERESTS AND US BALLISTIC MISSILE DEFENSES

by

Ronald G. Jacobson

December 1998

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The People's Republic of China (PRC) has undertaken extensive military modernization efforts in the post-Cold War period. Many of these efforts are directed at curbing what the Chinese consider unchecked US influence in the Asia-Pacific region. Continuing efforts by the United States to develop and deploy ballistic missile defenses (BMD) threaten to undermine the PRC's sole overseas power projection instrument, ballistic missiles, leaving Beijing with a seriously weakened repertoire for coercion and undermining Beijing's long-term goal of acquiring the ability to counter US influence. This thesis examines China's national security interests in the near future and the ballistic missile defense capabilities being pursued by the United States. It then analyzes the implications of the potential competition between US BMD and Chinese ballistic missiles for Sino-American security relations.

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CHINESE SECURITY INTERESTS AND US BALLISTIC MISSILE DEFENSES

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of the requirements for the degree of

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ABSTRACT

The People's Republic of China (PRC) has undertaken extensive military modernization efforts in the post-Cold War period. Many of these efforts are directed at curbing what the Chinese consider unchecked US influence in the Asia-Pacific region. Continuing efforts by the United States to develop and deploy ballistic missile defenses (BMD) threaten to undermine the PRC's sole overseas power projection instrument, ballistic missiles, leaving Beijing with a seriously weakened repertoire for coercion and undermining Beijing's long-term goal of acquiring the ability to counter US influence. This thesis examines China's national security interests in the near future and the ballistic missile defense capabilities being pursued by the United States. It then analyzes the implications of the potential competition between US BMD and Chinese ballistic missiles for Sino-American security relations.

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LIST OF ACRONYMS

ABM	Anti-Ballistic Missile
BMD	Ballistic Missile Defense
BMDO	Ballistic Missile Defense Organization
BPI	Boost Phase Intercept
C^3I	Command, Control, Communications, and Information
CCP	Chinese Communist Party
CMC	Central Military Commission
CSS	Chinese Surface to Surface (missile)
CTBT	Comprehensive Test Ban Treaty
DPP	Democratic Progressive Party (Taiwanese)
FBIS	Foreign Broadcast Information Service
GBI	Ground Based Interceptor
GEM	Guidance-Enhanced Missile
GPS	Global Positioning System
IAEA	International Atomic Energy Agency
ICBM	Intercontinental Ballistic Missile
IRBM	Intermediate Range Ballistic Missile
KMT	Kuomintang
MAD	Mutually Assured Destruction
MIRV	Multiple Independently-targetable Reentry Vehicles
MRBM	Medium Range Ballistic Missile
MTCR	Missile Technology Control Regime
NATO	North Atlantic Treaty Organization
NFU	No-First-Use
NGO	Non-Governmental Organization
NMD	National Missile Defense

NPT	Nuclear Non-Proliferation Treaty
PAC	Patriot Advanced Capability
PAP	People's Armed Police
PLA	People's Liberation Army
PLAAF	People's Liberation Army Air Force
PLAN	People's Liberation Army Navy
PNE	Peaceful Nuclear Explosion
PRC	People's Republic of China
RMA	Revolution in Military Affairs
ROC	Republic of China (Taiwan)
SALT	Strategic Arms Limitation Talks
SDI	Strategic Defense Initiative
SLBM	Submarine Launched Ballistic Missile
SRBM	Short Range Ballistic Missile
START	Strategic Arms Reduction Treaty
TEL	Transporter-Erector-Launcher
THAAD	Theater High Altitude Air Defense
TMD	Theater Missile Defense

EXECUTIVE SUMMARY

Efforts by the United States to develop and deploy ballistic missile defenses (BMD) threaten to undermine the sole overseas power projection instrument of the People's Republic of China (PRC), leaving Beijing with a seriously weakened repertoire for coercion. This thesis examines the ballistic missile defense capabilities being pursued by the United States and assesses their implications for Sino-American security relations. In light of Beijing's post-Cold War international perceptions and national security concerns, what role do the Chinese assign to ballistic missiles and nuclear weapons in their national security? How might the PRC adjust its national security strategy to respond to US BMD capabilities and how would those adjustments affect US security interests in Asia?

To answer these questions this thesis examines three topics: first, the perspective from which Beijing approaches international relations, the foundation of the PRC's national security strategy, and the role ballistic missiles and nuclear weapons have in this strategy; second, the United States ballistic missile defense effort and its probable future; and third, the implications of effective US BMD capabilities for Chinese security policies.

The thesis concludes that Chinese strategic culture can sufficiently explain current Chinese security concerns and actions; that Beijing's nuclear security ambitions are not "outside the box" of normal international behavior; and that despite some US fears of Chinese regional hegemony, the evidence is lacking to suggest that China will be a destabilizing force for regional security. Serious economic and political cohesion troubles within the PRC will not diminish in the near term. Consequently, US action to counter a

regional Chinese security threat by containment or confrontation is premature. While such possibilities should not be ruled out, a cautious vigilance regarding Chinese political-military behavior and efforts to engage China and to foster a stronger regional security dialogue are more appropriate. Despite recent growth rates, China's economic prospects are precarious. For this reason and others, the United States and China have a common interest in promoting regional stability.

China is already addressing future US BMD capabilities while shaping its national security strategies for the next century. Beijing apparently aims to curb US influence through area denial strategies. Beijing plans to combine missiles and blue water naval forces to inject uncertainty into US intervention calculations. US ballistic missile defenses would challenge China's area denial strategy by potentially negating China's short and medium range ballistic missiles.

The implications of US BMD for China's nuclear deterrent are secondary to those US BMD would have for Chinese conventional power projection capabilities. China has, however, manifested a growing sensitivity toward the international climate on nuclear issues. China is modernizing its nuclear forces to close the qualitative gap between China and the West. China would prefer to avoid international arms control efforts, but increasingly must take them into account in its overall national security strategy, lest it find itself ostracized. China's actions demonstrate that, despite its declaratory policy, it is trying to limit the extent of its involvement in arms control.

It is not apparent that China wants conflict with the United States. It is in US interests to reassure Chinese leaders, both politically and militarily, particularly on the bilateral level.

The Chinese are seeking the ability to counter what they consider unchecked US regional power. At least for the time being, however, the Chinese do not want the United States to remove its political-military presence from the region. A reduced US political-military presence would invite Japan to build up its military, a greater long-term concern for Chinese national interests than US influence in the region. China's interest in maintaining constructive economic and political relations with the United States offers the United States an opportunity to pursue its decisions about missile defenses in East Asia in a cautious and deliberate manner, with due attention to the risk of provoking unintended and undesirable consequences.

I. INTRODUCTION

In the summer of 1995 and the spring of 1996, the People's Republic of China (PRC) conducted missile tests in the Taiwan Strait using DF-15/M-9 short range ballistic missiles, one of China's newer ballistic missiles. Despite questions surrounding the dual capability of the DF-15, the uncertainty sent an implicit nuclear threat to Taiwan that was strangely out of place in the post-Cold War era, strong even by superpower standards during the Cold War, "and unprecedented on China's part."[1] The 1996 crisis emphasized the PRC's missile capabilities and revealed glaring weaknesses in the other aspects of the PRC's defense establishment, particularly in power projection. The PRC's lack of blue water naval capability effectively inhibits overseas power projection in the traditional sense — ships, long-range attack aircraft, and the ability to insert land forces beyond its borders. Overseas military coercion for the PRC is effectively limited to missile threats.

Efforts by the United States to develop and deploy ballistic missile defenses (BMD) threaten to undermine the sole overseas power projection strong point of the PRC, leaving Beijing with a seriously weakened repertoire for coercion. This thesis examines the ballistic missile defense capabilities being pursued by the United States and assesses their implications for Sino-American relations.

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[1] Richard D. Fisher Jr., "China's Missiles Over the Taiwan Strait: A Political and Military Assessment," in *Crisis in the Taiwan Strait*, James R. Lilley and Chuck Downs, eds. (Washington, D.C.: National Defense University Press, 1997), 167-168.

A. RESEARCH QUESTION AND HYPOTHESIS

In light of Beijing's post-Cold War international perceptions and national security concerns, what role do they assign to ballistic missiles and nuclear weapons in Chinese national security? How might the PRC adjust its national security strategy to respond to US BMD capabilities and how would those adjustments affect US security interests in Asia? In the last ten years, the United States, Russia, Britain, and France all quantitatively reduced their nuclear stockpiles. Ukraine, Belarus, and Kazakhstan, born into the nuclear club following the Soviet Union's breakup, eventually gave up all nuclear weapons capabilities. South Africa also willingly gave up its indigenous nuclear weapon capability. In contrast, the PRC has resisted the global nuclear trend in the post-Cold War era, keeping its nuclear armament levels constant while working to improve the capabilities of current forces.[2] Nuclear weapons remain a key component of PRC aspirations for great power status. Ballistic missiles are key power projection components of China's military forces. While its economic and conventional force potentials remain great, substantial time is needed for developing these potentials before either economic or conventional forces could alone support PRC status as a great power. In the interim, nuclear weapons help to fill the existing gap between Beijing's aspirations and its capabilities.

If the United States continues its research and development efforts and eventually deploys advanced BMD capabilities, what consequences might arise with the PRC? United

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[2] Robert S. Norris, Andrew S. Burrows, and Richard W. Fieldhouse, *Nuclear Weapons Databook, Volume V: British, French, and Chinese Nuclear Weapons* (Boulder, CO: Westview Press, 1994), 8-10; additionally used were the yearbooks published by the Stockholm International Peace Research Institute, *SIPRI Yearbook: World Armaments and Disarmament*, (New York: Oxford University Press); published annually, 1991-1997.

States BMD capabilities could erode China's ballistic missile capabilities, undermine this nuclear factor and place the PRC in a position of significantly reduced international status. In this respect, Alastair Iain Johnston's research has revealed a troubling tendency in China's behavior. As China's international stature and power have grown since 1949, the likelihood of the PRC becoming involved in militarized disputes has not gone up, as some foreign critics of China presume. Inauspiciously, however, those disputes in which it *has* become involved included predominantly threats to China's territorial integrity or international stature *and escalated to higher levels of force quickly.*[3]

The argument here is not that because of a traditional Chinese strategic culture, the PRC is (or will) remain benign beyond its borders.[4] Instead, the argument is that Chinese strategic culture can sufficiently explain current Chinese security concerns and actions; that Beijing's nuclear security ambitions are not "outside the box" of normal international behavior; and that despite some US fears of Chinese regional hegemony, the evidence is lacking to suggest that China will be a destabilizing force for regional security. Serious economic and political cohesion troubles within the PRC will not diminish in the near term. Consequently, US action to counter a regional Chinese security threat by containment or confrontation is premature. While such possibilities should not be ruled out, a cautious vigilance regarding Chinese political-military behavior and efforts to engage China and foster a stronger regional security dialogue are more appropriate. Despite recent growth rates,

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[3] Alastair Iain Johnston, "China's Militarized Interstate Dispute Behavior 1949-1992: A First Cut at the Data," *The China Quarterly* (March 1998), 1-30.

[4] Yan Xuetong, "China's Post-Cold War Security Strategy," *Contemporary International Relations* 5, No. 5 (May 1995), 6-7; cited in Denny Roy, "The 'China Threat' Issue: Major Arguments," *Asian Survey* 36, No. 8 (August 1996), 763.

China's economic prospects are precarious. For this reason and others, the United States and China have a common interest in promoting regional stability.

B. SCOPE

Finding the answers to these questions requires three steps: first, understanding the perspective from which Beijing approaches international relations, the foundation of the PRC's national security strategy, and the role ballistic missiles and nuclear weapons have in this strategy; second, understanding what comprises the United States missile defense effort and its probable future; and third, an assessment of the implications US BMD would have on Chinese security to determine what consequences may be in store for the Asia-Pacific region and Sino-American relations. The first requirement — understanding Beijing's perspective — invites a broad array of issues and influencing factors to the research. Not all can or should be pursued thoroughly in this work, and some will be only briefly mentioned. The intent is not to define in detail Beijing's international relations outlook, but to provide sufficient background to proceed with the BMD assessment.

C. RELEVANCE

In the post-Cold War era, an economic boom swept the Asia-Pacific region. During this boom, the PRC's economy grew at an average annual rate of 9 percent, and despite the region's current economic turmoil, China's economy remains relatively strong.[5] Benefitting

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[5] China's economic expansion began in 1979 when Deng Xiaoping initiated economic reforms. Gerald Segal and Richard H. Yang, eds., *Chinese Economic Reform: The Impact on Security* (New York: Routledge, 1996), 4. "China" and "Chinese" throughout this thesis refer to the PRC and its citizens. When needed, the terms "Taiwan" and "Taiwanese" will be used for the Republic of China and its citizens. When referring to the ethnic Chinese population beyond these two political entities, the phrase, "ethnic Chinese" will be used in conjunction with any specific state (e.g., ethnic Chinese in Singapore).

from China's economic success, the budget of the People's Liberation Army (PLA) also has grown. Combined, China's post-Cold War economic and military growth has fueled concern about its regional (and global) intentions and ambitions. Official Chinese figures put the PRC's military budget at US $9.7 billion in 1997, up from US $7.6 billion in 1995 and US $8.6 billion in 1996. Inflation also grew at 17 percent and 8 percent in these years respectively, meaning official budget figures barely maintained pace with inflation. These official PRC figures fall short of actual military expenditures by not including military research and development, foreign military equipment purchases, direct subsidies to Chinese military industries, and funding for the People's Armed Police (PAP). Additional income generated by PLA earnings from commercial activities and PLA-run farms bring estimates to a more realistic but less precise range of US $28 billion to US $50 billion.[6]

Chinese economic success fuels not only regional, but also global speculation that early in the twenty-first century the PRC "may become the world's largest economy as well as the largest market."[7] If current economic trends in China continue, the PRC will likely become the most influential economic and military power in East Asia within the next decade. Amicable relations with China might then be deemed essential, given US regional national interests. It would make little sense for the United States to pursue near-term missile defense policies that would in a longer term undermine US national security. Examining the

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[6] *SIPRI Yearbook 1994*, 441-448; *SIPRI Yearbook 1997*, 197 ; International Institute for Strategic Studies, *The Military Balance 1997/98* (London: Oxford University Press, 1997), 176. James R. Lilley and Chuck Downs, "Introduction: Crisis in the Taiwan Strait," in *Crisis in the Taiwan Strait*, edited by James R. Lilley and Chuck Downs (Washington, D.C.: National Defense University Press, 1997), 4.

[7] Institute for National Strategic Studies, *1998 Strategic Assessment: Engaging Power for Peace* (Washington, D. C.: National Defense University, 1998), 37.

implications that US BMD capabilities might present for Sino-American relations may be useful in identifying potential policy conflicts and possible remedies. Answering the question of why ballistic missiles and nuclear weapons remain so important in Chinese national security strategy is particularly relevant to the regional security calculus and thus to the United States, which has significant regional economic stakes and security commitments. Of the various means available to the Chinese Communist Party (CCP) and the Central Military Committee (CMC) for ensuring national security, nuclear weapons constitute one of the instruments most poorly understood by foreign analysts. As a major power, China is also adapting ballistic missiles to a broader strategy than Western states. The United States might inadvertently complicate its own security challenges because of the unexpected and undesired effects resulting from pursuing and acquiring capabilities such as advanced theater and national ballistic missile defenses.

D. METHODOLOGY

This thesis uses a strategic cultural case study approach to examine Chinese international relations. International relations theories alone are insufficient for grasping the importance of ballistic missiles and nuclear weapons in Chinese national security. Strategic culture provides what generic international relations theories do not: the unique details that cannot be ignored in efforts to understand state actions. Jack Snyder characterizes strategic culture as "the sum total of ideas, conditioned emotional responses, and patterns of habitual behavior that members of a national strategic community have acquired through instruction

or imitation and share with each other."[8] The intent of this thesis is not to devise a broadly generic cultural theory from which to assess Chinese strategic culture, nor is it to apply a broad generic cultural theory to the Chinese case. The strategic culture approach, combined with the case study methodology, is necessary because Chinese cultural characteristics influence Beijing's perceptions of the international community, and China's experiences have shaped these cultural characteristics.

E. ORGANIZATION

This thesis has three main sections, presented in Chapters II through IV. Chapter II investigates Chinese national security, emphasizing foreign relations and security policies as they relate to Chinese national security objectives. This chapter provides an answer to what drives China's national security strategy and why certain issues receive priority in its national security calculus. The questions of what makes nuclear weapons and ballistic missiles vital to Chinese security, and of why the Chinese are concerned about US missile defenses are left to Chapter IV.

Chapter III examines US ballistic missile defense programs. The primary focus is on theater missile defenses (TMD) vice national missile defenses due to the relative success and greater probability of near-term deployment, although national missile defense (NMD) is also briefly examined. Prospective BMD hardware capabilities as well as probable deployment postures are examined.

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[8] Jack Snyder, *The Soviet Strategic Culture: Implications for Limited Nuclear Operations*, RAND Report [R-2154-AF] (Santa Monica, CA: RAND, 1977); cited by Michael C. Desch, "Culture Clash: Assessing the Importance of Ideas in Security Studies," *International Security* 23, No. 1 (Summer 1998), 152.

Chapter IV assesses Chinese concerns about US ballistic missile defenses and the potential impact of the United States missile defense programs on China's national security, particularly the roles ballistic missiles play and how they could be affected. Costs and benefits are examined. The cost of US missile defenses to Sino-American relations could be significant, but the United States might choose to pay the price in order to be able to respond to non-Chinese missile threats (and to be able to deal with Chinese missile threats to Japan, Taiwan, and South Korea) despite potential consequences involving Sino-American relations.

Chapter V summarizes the findings, highlighting those aspects of ballistic missiles and nuclear weapons in Chinese national security, as well as US missile defense concerns, which threaten trouble for bilateral relations and those aspects which may favor constructive bilateral cooperation.

II. INTERNATIONAL RELATIONS AND NUCLEAR WEAPONS IN CHINA

Scholars in the West continue to discuss which international relations theory best describes the international environment. Whether a particular theory accurately does so is not the issue here. Rather, the issue is what theory explains how the PRC *perceives* states' behavior in the current international environment. Is it possible that Chinese leaders consistently shape their decisions and actions such that an existing theory describes their behavior? Structural patterns in the PRC's security policy contain deeply rooted cultural characteristics based on Chinese history. These patterns are seen not only in China's security behavior, but in its larger international relations behavior. Realism explains the Chinese leadership's perceptions of the international environment, while complex interdependence is also needed to sufficiently explain their resultant national security behavior. Nuclear weapons play a significant role both in Chinese perceptions of the international environment and in Chinese behavior, particularly regarding the major political powers.

A. BEIJING'S PERCEPTION OF INTERNATIONAL RELATIONS

Beijing's perception of the international environment is a *Realpolitik* one. This perspective, however, is slowly yielding to the influence of complex interdependence theory, especially economic interdependence, while Beijing continues in its general disdain for Western liberal political philosophies. The use of these two concepts, *Realpolitik* and economic interdependence, is not contradictory. It shows the bias of the PRC leadership in conceptualizing the international environment in realist terms and acting with realist expectations, while implementing policies which reflect a greater set of factors included with economic interdependence.

1. *Realpolitik*

Chinese international perceptions and national security behavior are fundamentally *Realpolitik*. The limited acceptance of economic interdependence that has occurred results from a cautious recognition of the theory's benefits that supercede the PRC's past international self-isolation. Beijing's *Realpolitik* perceptions have not significantly eroded under this economic interdependence influence, nor does it appear that a shift to a fundamental non-*Realpolitik* perspective is imminent.[9]

Realism argues that relations among states can be explained by each state's desires to acquire power that guarantees state security. There are three assumptions that accompany this perspective. First, realism assumes states are unitary actors and dominant in world politics. Second, realism assumes that force is "a usable and effective instrument of policy." And third, realists have a "hierarchy of issues in world politics, headed by questions of military security: 'high politics' of military security dominates the 'low politics' of economic and social affairs."[10] For realists:

> Each state attempts to defend its territory and interests from real or perceived threats. Political integration among states is slight and lasts only as long as it serves the national interests of the most powerful states. Transnational actors either do not exist or are politically unimportant. Only the adept exercise of force or the threat of force

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[9] See Alastair Iain Johnston, *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History* (Princeton, NJ: Princeton University Press, 1995); Alastair Iain Johnston, "China's New 'Old Thinking': The Concept of Limited Deterrence," *International Security* 20, No. 3 (Winter 1995/96), 5-42; Alastair Iain Johnston, "Prospects for Chinese Nuclear Force Modernization: Limited Deterrence Versus Multilateral Arms Control," *The China Quarterly*, (June 1996), 548-576; Alastair Iain Johnston, "Cultural Realism and Strategy in Maoist China," in *The Culture of National Security: Norms and Identity in World Politics*, Peter J. Katzenstein, ed., (New York: Columbia, 1996), 216-268; Johnston, "China's Militarized Interstate Dispute Behavior"; Yong Deng, "The Chinese Conception of National Interests in International Relations," *The China Quarterly* (June 1998), 308-329.

[10] Robert O. Keohane and Joseph S. Nye, *Power and Interdependence: World Politics in Transition* (New York: Little, Brown, 1977), 24.

> permits states to survive, and only while statesmen succeed in adjusting their interests, as in a well-functioning balance of power, is the system stable.[11]

Realism alone does not sufficiently explain the specific manifestations of China's behavior. While realism explains China's general perceptions and behavior, Chinese culture is required to understand the specifics of China's security decisions. One notable exception is that China deviates from the traditional realist hierarchy of military and economic power. Traditional realists emphasize military power (or security) and marginalize economics, whereas Chinese realists emphasize that military power derives from a state's economic power.[12] This is what allows economic interdependence to encroach on Chinese *Realpolitik*. In current debates surrounding a post-Cold War Revolution in Military Affairs (RMA), the recurring theme is that the civilian sector is bringing the changes on the military sector, a reversal of historical patterns. The Chinese are believers in this relationship, recognizing that "to the extent that the revolution proceeds from forces in the civilian world, the potential will exist for new military powers to emerge extremely rapidly."[13] Economic power enables military power. China's growing economic power reflects a potential to more quickly translate civilian technologies into military capability. As such, China's military power, the fulcrum of its *Realpolitik* outlook and its national security strategies, hinges on continuing China's economic success.

China subscribes to realism's state-centric notion, including the condition of anarchy that undergirds the need for power to ensure its security. Chinese perceptions of the world

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[11] *Ibid.*

[12] Yong Deng, 314.

[13] Eliot A. Cohen, "A Revolution in Military Affairs," *Foreign Affairs*, (March-April 1996), 51.

portrays it as almost exclusively an arena of states engaged in merciless competitions.[14] States jostle to achieve their own national objectives using political pressure backed by economic and military strength, a recurring concept throughout the twentieth century. The imposition of Western colonialism on much of Africa, South Asia, and Southeast Asia in the preceding three centuries persuaded Chinese leaders that nothing less than national survival was at stake in a Darwinian struggle among states.[15] This geopolitical perspective is summed up as: "A state must have space to breathe, grow, and expand.... Strong states must develop their own complete economic base, including the defense economy, so that they will not be dependent on any other state."[16]

Accompanying this state-centric approach is the domestic-international dichotomy often found in realism. The domestic realm is solely the responsibility of the individual state while the international realm allows states to conduct power politics and achieve gains that

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[14] Western international relations theory works remain heavily censored in China. However, works by Western realists (either structural or classical) are being increasingly translated and published with government consent. Deng documents a list of these allowed works, among whom are E.H. Carr, Robert Gilpin, Robert Jervis, and Kenneth Waltz. Yong Deng, 311, 320-322.

[15] Andrew J. Nathan and Robert S. Ross, *The Great Wall and the Empty Fortress* (New York: W. W. Norton & Company, 1997), 27.

[16] Jack Child, *Geopolitics and Conflict in South America: Quarrels Among Neighbors* (New York: Praeger Publishers, 1985), 22. "Classical" geopolitical theory begins with the idea of the organic state. It is noteworthy that Child adds the following observations: "The nation state is a living organism that requires living space, resources, and a purpose; the state also has a life cycle in which it is created, matures, declines, and finally disappears." Because there are other states also experience this same cycle, a sense of Darwinian competition exists, "with stronger states devouring the weaker ones and incorporating them into their spheres of influence." Many chapters in US national history (for example, Manifest Destiny, the Monroe Doctrine, the Big Stick Policy) were based on geopolitical notions of power, geographical advantage, and power politics." So were Alfred Thayer Mahan's theory of sea control, and Sir Halford Mackinder's theories of land transport. Child, 20-23.

improve leverage and reinforce security. Analysts examining Chinese international relations find this dichotomy consistent throughout PRC history.[17]

China is concerned with the relative balance or relative gains occurring among interacting states. A particular interaction, be it conflict or cooperation, is not necessarily going to be zero-sum. The Chinese accept the economist's belief that every state involved may gain, and that perhaps some will gain more than others (interactions are not zero-sum). China goes a step further, believing that relative differences in these gains among the states involved matter. (In other words, *absolute* gains are irrelevant.) It is this difference that is of primary concern.

Alastair Iain Johnston argues in his assessment of a *parabellum* paradigm that China's perspective of the international environment is one of inherent danger, adversaries by nature threatening, and conflict as zero-sum in which force is ultimately required to deal with threats. The PRC "stresses absolute flexibility and a conscious sensitivity to changing relative capabilities. The more this balance is favorable, the more advantageous it is to adopt coercive strategies; the less favorable, the more advantageous it is to adopt defensive or accomodationist strategies to buy time."[18]

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[17] "The emerging consensus among Chinese authors is that national interests in international relations can be understood *sui generis* and are to be separated from domestic politics." Yong Deng, 310, 313.

[18] Johnston, "Cultural Realism and Strategy in Maoist China," 219-220.

The PRC has not been a *status quo* power.[19] But neither is it a rogue state. Although dissatisfied with its international stature, China is striving to raise its international stature by fueling economic growth and facilitating military modernization. Raising, or trying to raise, its stature by open military aggression is not China's strategy nor particularly in its interest. That is to say, the use of force remains a prospect in the PRC's security strategies, but it is not necessarily the priority. Pursuing economic growth and military modernization enables China to strengthen its influence regionally, to reinforce its international self-perception, and to bolster arguments for greater Chinese stature to the rest of the world.

At the same time, the amount of effort China is directing to its economic growth and military modernization alarms its neighbors and increasingly draws US concern. Because of ambiguities surrounding Chinese regional intentions, some Western experts on China and foreign policy analysts argue that the United States and its allies need to conduct a greater effort to contain and counter, at a minimum, China's growing regional power. This "China Threat" school prefers to address the problems now and not face what will be a much more difficult challenge later. Western realist fears hinge on what China may be able to do with its power once it is no longer held back by current constraints on PRC behavior. In this thesis, analysts in this group will be categorized as China "pessimists." This containment argument poses a particular problem, however, in that it relies heavily on deterrence. Although it is

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[19]. Segal and Yang, 1. Segal has also characterized the Chinese as having "the least commitment to the status quo of any important power. It wishes to occupy Taiwan and take territory from most of its neighbors in East Asia. It wishes to join the World Trade Organization but without being bound by the dispute settlement mechanism or other rules that bind all other members. It wishes to have access to our markets but not to provide access to its own. It wishes to sell dangerous weapons around the world and dangerous technology to the likes of Iran." Gerald Segal, "We Can Shape China as a Congenial Superpower," *Los Angeles Times*, 7 August, 1995, B5; cited by Roy, "The 'China Threat' Issue," 761.

believed that deterrence as practiced during the Cold War between the United States and Soviet Union averted nuclear war, the conclusion is debated. Using similar deterrence strategies to contain Communist China is more problematical and doubtful than deterrence was against the Soviet Union. Reactions to the Indian and Pakistani nuclear tests earlier this year resulted in a split among the powers in the Group of Eight on sanctions. While Canada, the United States, and Japan enacted sanctions, the British, French, and Russians stood opposed. It is questionable that the United States has the range of influence to build a global consensus to begin and sustain a containment effort against China.

Other Asia analysts oppose any effort to portray China as either a "rogue" or "hegemonistic" power. The historical record of the PRC, particularly in the last two decades, does not support claims of rogue behavior, nor would it be in China's national security interest to be viewed as such. At worst, it desires to emulate, in its own region, US dominance in the Western Hemisphere. To apply ether the rogue or hegemonistic label could very likely bring about that very behavior by China (a self-fulfilling prophecy.)[20] In this thesis, analysts in this group will be categorized as China "optimists."

Johnston, in a recent examination of the PRC's international dispute behavior from 1949 to 1992, argues that during the Cold War, the PRC was more dispute-prone than the other major powers *except* for the United States. And "while China was not the most likely

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[20] David M. Lampton, "China: Think Again," *Foreign Policy* (Spring 1998), 13.

of the major powers to fall into crises and militarized conflicts, *it was more likely to use a higher level of violence than other states in such a dispute.*"[21]

Johnston provided two caveats to his dispute-prone, force-intensive assessment. First, China's past force-intensive disputes revolved around territorial disagreements. Although in the post-Cold War period China has resolved some border disputes with Laos, Kazakhstan, Tajikistan, Kyrgyzstan, and Russia, China still has unresolved boundary or territorial disputes with Russia, Tajikistan, North Korea, Vietnam, India, Japan, Malaysia, the Philippines, and Brunei.[22] This is not an auspicious caveat. Johnston's second caveat, however, is more promising:

> the growth of China's relative power capabilities by itself *has not led to an increase in Chinese dispute proneness*. Rather, as China's share of world power resources has increased — and by extension as the perceived gap between ascribed and desired international status has closed — China has tended not to act in a more conflictual manner.[23]

There is insufficient evidence to support the conclusion that China's growing capabilities will necessarily result in more danger to regional security.

Characteristic of a *Realpolitik* perspective, China places a premium on protecting state sovereignty. The Chinese emphasis, however, is surprisingly strong for a state in today's

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[21] Alastair Iain Johnston, "China's Militarized Interstate Dispute Behavior," 6-7, 27-28; emphasis added. He warns skepticism is needed toward the conventional wisdom on Chinese use of force. Citing a variety of authors, Johnston paints the conventional wisdom as one where traditionally China is reluctant to resort to force; using it only as a last resort to resolve a dispute.

[22] Nathan and Ross, 9.

[23] Johnston, "China's Militarized Interstate Dispute Behavior," 28; emphasis added.

climate of international organizations and multinational corporations.[24] China takes the realist concept of unitary acting states engaging in power politics and reifies sovereignty.[25] In Jiang Zemin's political report to the Fourteenth National Chinese Communist Party Congress, the Chinese President stated, "When it comes to issues involving national interests and state sovereignty, China will never concede to outside pressure."[26]

China also prefers bilateral to multilateral diplomacy. Wary of strengthening global customs and norms which detract from its ability to determine its own security, China resorts to bilateral diplomacy because it tends to be less confining — meaning that it entails less intrusion on state sovereignty. Optimists counter assertions of a Chinese bilateral preference by referring to China's involvement in arms control agreements for supporting evidence. Chinese participation in arms control has grown in scope, particularly in the post-Cold War period. The Nuclear Non-Proliferation Treaty (NPT), Comprehensive Test Ban Treaty (CTBT), and testing moratorium supposedly counter Chinese bilateral preference arguments. But China's participation in these arms control agreements has been largely due to two factors — a reluctant response to international political pressure or the recognition of significant relative gains for China.[27] If China can adequately solve a particular problem using either of

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[24] Samuel S. Kim, "Mainland China in a Changing Asia-Pacific Regional Order," in *Contemporary China in the Post-Cold War Era*, Bih-jaw Lin and James T. Myers, eds. (Columbia, SC: University of South Carolina Press, 1996), 270.

[25] Yong Deng, 312.

[26] From the full text reprint as provided by *Daily Report: China*, FBIS-CHI-92-204, October 21, 1992; cited in Kim, 296.

[27] Banning N. Garrett and Bonnie S. Glaser, "Chinese Perspectives on Nuclear Arms Control," *International Security* 20, No.3 (Winter 1995/96), 44.

two methods with each resulting in essentially identical outcomes, and one is a bilateral agreement while the other is multilateral, the PRC will opt for the bilateral agreement.

2. Complex Interdependence

Bridging realism and its liberal competitors within the international relations theory spectrum is complex interdependence. The concept has been around since the start of the Twentieth Century, but gained in strength in the post-Cold War period. Robert O. Keohane and Joseph S. Nye elaborated a theory in the late 1970s with three main characteristics.

> First, multiple channels connect societies, including: informal ties between governmental elites as well as formal foreign office arrangements; informal ties among nongovernmental elites; and transnational organizations.... Second, the agenda of interstate relationships consists of multiple issues that are not arranged in a clear or consistent hierarchy.... Third, military force is not used by governments toward other governments within the region, or on the issues, when complex interdependence prevails.[28]

Keohane and Nye's first characteristic applies to China today. Their second characteristic is debatable. And the third characteristic is the least likely to be found prevailing in Chinese behavior.

China's *Realpolitik* perspective shares its relative gains outlook with complex interdependence. Keohane and Nye argue:

> Two different perspectives can be adopted for analyzing the costs and benefits of an interdependent relationship. The first focuses on the joint gains or joint losses to the parties involved. The other stresses *relative* gains and distributional losses. Classical economists adopted the first approach in formulating their powerful insight about comparative advantage: that undistorted international trade will provide overall net benefits. Unfortunately, an exclusive focus on joint gain may obscure the second key issue: how those gains are divided. Many of the crucial issues of interdependence revolve around the old question of politics, "who gets what?"[29]

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[28] Keohane and Nye, 24-25.

[29] *Ibid.*, 10.

Beyond the relative gains and the influences of multiple channels, the inroads interdependence concepts have made with CCP leaders is limited. China's leaders embrace economic interdependence out of convenience because it involves enhanced leverage over other states, giving China an excuse to exercise power politics and interfere in other states' national affairs.[30] Beijing finds it convenient to manipulate economic interdependence to justify aspects of its domestic economic restructuring — without admitting claims of liberal erosion of traditional Maoist values — as well as to increase its ties with Taiwan and thus the strings available to manipulate the island.[31] Since limitations of its own choosing (the conventional military forces available) and limitations of the international environment currently prevent Beijing from forcing Taiwan to rejoin the mainland, Beijing is willing to explore interdependence methods.

Liberal concepts in general have some influence on Chinese policy, as China is noticeably more susceptible to ideas and policies of interdependence, multilateralism, and collective security.[32] But China's international perceptions remain *Realpolitik*. China may contradict the realist outlook at times. However, this is probably because the situation forces them to do so or because they see greater gains from Chinese compliance.

There are a few Chinese scholars and even Chinese officials who accept or promote the Western liberal theories like complex interdependence. But even these scholars and

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[30] Yong Deng, 323.

[31] *Ibid.*, 317-320.

[32] *Ibid.*, 329.

officials remain wary, perplexed by the coexistence of interdependence and power.[33] Yong Deng, in an interview with one Chinese academic "liberal," noted that there is difficulty to accept the ideal of complex interdependence when quite obviously "the most advanced and most 'internationalist' country [engages] in hegemonic behavior in the pursuit of a narrow, myopic self-interest under high sounding excuses."[34] Is interdependence, along with other Western liberal international relations theories, merely a tool in a larger context of extending Western hegemony? As long as that doubt exists, interdependence cannot become the dominant factor in Chinese international relations.

Aside from the manipulation of economic interdependence in certain cases, the blurring of the realist domestic-international dichotomy provides noticeable evidence of a slow erosion of realist perceptions, whether acknowledged or not. The reliance of Chinese economic success on interstate commerce reflects this, as does China's adherence to various international institutions, treaties, and regimes.[35] Some Western analysts of Chinese international relations argue that considering these situations, continued use of a domestic-international dichotomy to describe Chinese behavior oversimplifies the complex dynamics of Chinese post-Cold War security that are essential for making informed assessments.[36] Analysts can always construct more detailed explanations, complex in their interrelationships.

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[33] *Ibid.*, 322.

[34] *Ibid.*, 322-323.

[35] Lampton, 14.

[36] Kim, 264.

However, the domestic-international dichotomy is sufficient to understand Chinese post-Cold War national security behavior.

B. CHINESE NATIONAL SECURITY OBJECTIVES

The post-Cold War security environment has been conducive to the pursuit of the PRC's national security objectives; particularly because for the first time in more than a hundred years, China is without a significant external security threat.[37] An examination of perceived Chinese security threats today and into the future reveals, however, several emerging significant security concerns. Of these, the most significant national security threat China faces is the loss of CCP legitimacy with all its domestic implications. Contributing to the CCP legitimacy equation are a number of factors including domestic and regional stability, Chinese "great power" status, Chinese regional influence, and the future of energy and other resources.[38]

As these last two decades have progressed, the CCP has encountered increasingly more serious challenges to its legitimacy. This is a trend that originated with Deng Xiaoping's economic reforms in 1979. Challenges strengthened through the 1980s, generating the 1989 Tiananmen debacle. The problem has only become more complicated as a result of the shift to a domestic "performance-based" legitimacy in wake of the Cold War

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[37] There is no significant external security threat, no significant regional instability, and the disappearance of the Soviet Union eliminates a rival for Marxist based reform and relaxation of border tensions. See Ralph A. Cossa, "The PRC's National Security Objectives in the Post-Cold War Era and the Role of the PLA," in Lin and Myers, 200-202; Allen S. Whiting, "The PLA and China's Threat Perceptions," *The China Quarterly* (June 1996), 598-599.

[38] See Cossa, "The PRC's National Security Objectives," 209; also Harlan W. Jencks, "The PRC's Military and Security Policy in the Post-Cold War Era," in Lin and Myers, 225.

socialist ideological collapse.[39] Weakening CCP legitimacy is a concern among Chinese optimists and pessimists. This legitimacy situation has progressed to the point that "the PRC today is *a weak state pretending to be a strong state*."[40] Performance-based legitimacy means that an economic downturn would cascade into a crisis that could very well threaten CCP rule and state internal cohesion.

The declining legitimacy of the Chinese Communist Party is reflected by several pieces of evidence: the CCP's loss of a distinct identity, accelerated by the passing of Deng Xiaoping; a decline of the CCP's control over the state's peripheries due to increasing wealth and a restive population; pending environmental problems that threaten to undermine economic development; and a growing inability to control information.[41] This loss of control theme resonates nowhere else as strongly as with the level of state corruption.

> Historically, the level of corruption is accepted as one of the best proven symptoms of the extent to which the state has lost its legitimacy. Corruption in post-Mao China has been increasing so rampantly and multifariously as to make it a single measuring stick for state legitimacy and state effectiveness (capacity.)[42]

Though corruption has always been a problem in the PRC, it has never spread to the extent allowed as a result of Deng Xiaoping's economic reforms. To signify it has the legitimacy problem under control, the CCP must first reverse the spreading corruption. But this remains a daunting task. The CCP recognizes the problem and its implications for party power, yet

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[39] Kim, 298.

[40] *Ibid.*, 297; original emphasis.

[41] These four issues still plague the CCP. However, Kim also included questions of a succession crisis as a fifth piece of evidence, however since the publication of the article, the succession question has settled. Kim, 297-305. Also on the environmental degradation, see Lampton, 26-27.

[42] Kim, 299.

effecting corrective measures requires sweeping economic changes from the local to the national levels of government, from the private to the state sectors, and across the civilian and the military sectors. Harlan Jencks notes,

> Central leaders are vitally concerned to maintain political and economic discipline against the rising internal forces of regional and provincial autonomy....Political and economic leaders in the southern provinces strongly favor further expanded trade and investment links with Southeast Asia....For the remainder of the 1990s, PRC foreign policy will continue to be decided in Peking — albeit disrupted somewhat by regional leaders, businessmen, criminals, and even PLA officers, who will sometimes work at cross-purposes with Peking.[43]

This would be the mechanism through which an economic downturn threatens the CCP.

Recently, Jiang Zemin has tried to yet again to effect measures to reduce corruption, clamping down on military enterprises and embarking on long needed reforms to the vast, ailing state-owned enterprises. These current efforts are not the first time in the 1990s Jiang has made efforts to curb corruption. Earlier efforts proved to be ineffective. Local leaders, be they party or military, have increasingly become apathetic toward non-economic issues, instead choosing to focus on economic successes, be they through legitimate means or otherwise. The corruption problem is a catch-22 for Beijing: crack down harshly and likely stifle economic growth and undermine its cohesive nationalism, or look the other way and keep economic success going but seeing the center's control weaken. In either case, finding a way out of this paradox requires at a minimum regional stability.

1. Economics and Stability

It seems to be a contradiction to claim that regional stability is a Chinese national security objective considering the earlier point made that the PRC is not a *status quo* power.

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[43] Jencks, "The PRC's Military and Security Policy in the Post-Cold War Era," 228.

The need for stability is the nuance which distinctively separates Chinese behavior from being rogue despite desiring to improve its stature from its present stature in the international *status quo*.

The majority of conflicts globally in the post-Cold War era have been intrastate rather than interstate.[44] These intrastate conflicts increasingly involve ethnic conflict, a troubling trend for China that factors into its domestic concerns. Considering China's economic fragmentation and its corruption dilemma, regional stability is necessary to enable the CCP to retain state cohesion on its periphery. Undermining the current economic climate invites disaster. Stability fosters the needed climate for continued economic growth which subsumes any widespread domestic unrest. This reason undermines Chinese pessimists fears of a regionally aggressive PRC. "Chinese economic growth, which is essential for domestic political stability, would be placed in jeopardy if the PRC triggered [even] a region-wide arms race — nuclear or conventional," let alone open conflict which could portray China as an aggressor.[45]

Complicating China's need for regional stability is the level of corruption in the PLA, primarily involving unauthorized economic ventures. While the PLA has benefitted from Chinese economic success, China's military strength remains adversely affected twice-round.

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[44] Peter Wallensteen and Karin Axell conducted a study of the 1989-1992 period, and of 82 armed conflicts, the overwhelming majority were internal or state formation conflicts. Peter Wallensteen and Karin Axell, "Armed Conflict at the End of the Cold War, 1989-1992," *Journal of Peace Research* 30, No. 3 (1993), 331-46; cited in Kim, 267. "Statistics show that in 1992 alone, over 30 local wars and armed conflicts of varying size broke out throughout the world....As to the nature of these wars and conflicts, 25 were civil wars, and five were wars between nations." Xiao Bing and Qing Bo. *Can the Chinese Army Win the Next War?* Fang Yuan, ed. (Chongqing, 1993) Trans. FBIS, 5 May 1994, 1.

[45] Patrick J. Garrity, "Nuclear Weapons and Asia-Pacific Security," *National Security Studies Quarterly* (Winter 1998), 48.

Not only do questions emerge about where certain PLA unit loyalties lie — with the PLA or their enterprises — but also to what extent military readiness and professionalism is suffering. The extent of PLA involvement in the economic sector is a serious cause for concern. "In addition to the most obvious reasons (graft, corruption, and the possible stifling of legitimate private enterprise) [there] is a more fundamental concern; namely, that military units are becoming so involved in economic activities that they are forgetting their primary mission of training to defend the nation."[46]

> The PLA owns some of China's prime real estate and has leased it out at high rents. Many local airlines are owned and managed by PLA front companies. PLA ships and other modes of transport are put to good commercial use (and are heavily involved in smuggling rings.) The PLA's once elite hospitals will now admit those who can afford the price of admission. Virtually every military unit has set up one form or another of cottage industry, and many are involved in joint ventures with foreign entities. The General Staff Department has invested in several "five-star" hotels in China, including Beijing's luxurious Palace Hotel. Even the vaunted Second Artillery, which is responsible for the PLA strategic nuclear forces, is a partner in the Baskin & Robbins ice cream outlet in Beijing.[47]

When Deng Xiaoping initiated his economic reforms in 1979, military modernization was near the bottom of the priority list. As a result, the PLA had been severely underfunded in state budgets; so much so that existing forces were deteriorating. This deficiency resulted in the PLA needing to become innovative in acquiring funds, which in the new era of economic liberties gave rise to the current economic enterprise situation.[48] Elaborating further:

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[46] Cossa, "The PRC's National Security Objectives in the Post-Cold War Era," 217-218; also Ellis Joffe, "The PLA and the Economy: The Effects of Involvement," in Segal and Yang, 11-34; and David Shambaugh, "China's Fragile Future," *World Policy Journal* 11, No. 3 (Fall 1994), 41.

[47] *SIPRI Yearbook 1994*, 444.

[48] Joffe, 17-19, 27-28.

> More serious [corrective] steps would mean nothing less than a large-scale reduction of the army's economic activities, and the high command is obviously not ready to do this. Such a reduction would probably cause a crisis unless PLA units are compensated by a huge increase of funds, which are not available to the military leadership.[49]

2. Great Power Status

Another Chinese security objective is acquiring "great power" status. China's quest for a niche in the changing international order can be seen as an ongoing struggle in the course of which they attempt to secure an identity as a global power that others are reluctant to bestow, while others willingly bestow a negative characterization that China does not desire.[50] Since the Opium Wars of the mid-1800s, China has been militarily weak; it has been bullied and invaded by not only its neighbors, but also by Western powers. Beijing sees the opportunity to reacquire the stature China once knew within *its* world. Having nearly one quarter of the planet's population, controlling territory that ranks it behind only Russia and Canada geographically, and owner of the world's longest continuous civilization, China considers itself the region's natural leader. Great power status is an image, which requires sufficient political power leveraged internationally enabling China to first resist the pressure of any external meddling in what they consider domestic affairs, and then to exert its will and shape the regional environment.

> If China fulfills its expected potential, it will soon be a power in the class of 19th century Britain, the Soviet Union, Nazi Germany, Pacific War Japan, and 20th century America. Each of those countries used its superior power to establish some form of hegemony to protect and promote its interests....This would not necessarily involve the physical conquest and occupation of neighboring countries but would

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[49] *Ibid.*, 28.

[50] Kim, 266.

mean the use of various types of coercion to maintain an environment favorable to China's interests, and not necessarily anyone else's.[51]

During the Cold War, China received certain benefits from the bipolar international environment. Deficient in technology for conventional military capabilities, China compensated with attritional warfare (Mao's people's war concept.) Combined with nuclear weapons, Cold War bipolarity, and its geographic position, overwhelming numbers elevated China to a *quasi*-great power status. With the normalization of Sino-American relations in the 1970s, China became the balancer in an Asian balance of power between the United States and the Soviet Union. With the Cold War's collapse, economic inferiority meant China found itself suddenly demoted in international politics.[52]

But the emerging post-Cold War international multipolar environment provides benefits for the PRC's international outlook and security strategies which had been constrained by the Cold War environment. A multipolar environment provides a larger range of options from which to choose and bestows China with a stronger regional position, restoring some of the lost Cold War stature. The multipolar environment also facilitates bilateral diplomacy, which the Chinese prefer since bilateral diplomacy allows more freedom in negotiating. Bilateral diplomacy in a multipolar world allows China to exploit contradictions and differences between friends and enemies, playing them more easily off one another.[53] There is less encroachment on sovereignty since the need for multilateral compromises is reduced. One ironic aspect of

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[51] Roy, "The 'China Threat' Issue," 762.

[52] James C. Hsiung, "China's Omni-Directional Diplomacy: Realignment to Cope with Monopolar US Power," *Asian Survey* 35, No. 6 (June 1995), 575; and Kim, 267-269.

[53] J. Mohan Malik, "China's Policy Towards Nuclear Arms Control," *Contemporary Security Policy* 16, No. 2 (August 1995), 13.

a multipolar post-Cold War environment is that it allows Chinese manipulation of the defunct Cold War Asian balancer situation to make a Russian balancing possible between the United States and China. China is busy cultivating a Sino-Russian relationship.[54]

Multilateralism in a multipolar world, however, does not deprive Beijing entirely of these negotiating strategies, but flexibility is curtailed. Multilateralism weakens China's negotiating leverage by requiring greater cooperation and concessions. The need for greater compromise confines Chinese diplomacy and often requires concessions that undermine sovereignty.

3. PRC Regional Influence

While the changing international environment degraded China's global stature, its regional stature has strengthened, particularly in light of Japan's financial turmoil and the recent Southeast Asian crises. China's regional status prompts concerns about China's aspirations. Neighboring states warily eye China's modernization efforts. China pessimists see the PRC mincing words and using legalisms to obscure its goals and thus prefer to assume the worst.

Yet, pessimists place too much credit on questionable statistics, especially about the PRC's military modernization efforts. The problem of officially underfunding the PLA complicates assessments of China's capabilities and potential. Data on the PRC military budget is extremely flexible and anything but reliable.

> [SIPRI asserts] that total spending by the [PLA] is four to five times the amount officially reported (which Chinese military officers hotly dispute). If true, this would put actual 1996 PLA spending at US $35.5 to 44.4 billion. The Heritage Foundation

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[54] Kim, 267; Malik, "China's Policy Towards Nuclear Arms Control," 13.

puts the upper range estimate at US $40 billion. Japan, in 1996, with the American nuclear umbrella and the US — Japan Security Treaty, spent about US $45 billion.[55]

Of all the budgetary statistics cited, one relationship seems constant: that the PRC's rising military expenditures barely keep pace with inflation. Considering that of China's 14 neighbors, most either possess or are upgrading to modern weapons that surpass China's large quantities of outdated weaponry, China's efforts are actually much tamer than pessimists are willing to admit.[56] As reported by the Pacific Council on International Policy and RAND, "China's military expenditures as a percentage of total defense expenditures by all Asian countries have been decreasing steadily since the mid-1970s," this despite RAND's extreme high assessment of PRC military expenditures.[57] In the wake of US performance with advanced technology and professional forces in the 1991 Persian Gulf War, China's modernization efforts are to close what they consider to be currently a 25 year gap in military capabilities with the West. The drive is moving their defense posture from high quantity, low quality attritional forces to a lower quantity, but higher quality, rapid-reaction, high-tech force structure.

Also factoring into some China analyst fears is that in the post-Cold War period, the United States has risen to take a high priority on China's list of threatening states. China pessimists would place the United States at the very top of such a list, arguing that China is deeply angered by *de facto* US hegemonism. Chinese rhetoric charges that imperialist US policies interfere with China's continued economic development out of the fear of losing

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[55] Lampton, 15.

[56] Roy, "The 'China Threat' Issue," 764.

[57] Cited in Lampton, "China: Think Again," 16.

American influence both regionally and in China to other states.[58] Michael Yahuda points out that "war games played against the American 'enemy' have been standard since 1991."[59] Militaries necessarily plan for diverse conflict, however. To learn that China did *not* plan for a US eventuality would be a surprise.

China believes regional leadership (even regional hegemony) rightly belongs to it, and thus Beijing constantly denounces hegemonism as a crime perpetuated primarily by American "self-appointed international cops."[60] The rhetoric can be particularly bitter. Commented by one Chinese official:

> [The United States'] strategy towards China is to, through economic activities and trade, control and sanction China and force China to change the course of its ideology and make it incline towards the West; take advantage of opening up, personnel exchanges, and propaganda means to make ideological infiltration into China's upper strata; give financial assistance to hostile forces both inside and outside Chinese territories and wait for the opportune moment to stir up turbulence.[61]

But China would just as readily attempt to exercise similar regional influence. The PRC possesses a national goal of regional hegemony akin to the United States position in the Western Hemisphere. The effective restraint on this ambition is the intermediate need to maintain economic growth and domestic stability.[62]

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[58] Michael Yahuda, "Defence Modernization and Sino-American Relations," in Segal and Yang, 111.

[59] Whiting, 607. On the issue of war games, Whiting refers to interviews conducted by David Shambaugh, in "The Insecurity of Security: The PLA's Evolving Doctrine and Threat Perceptions Towards 2000," *Journal of Northeast Asian Studies* 13, No. 1 (Spring 1994), 3-25.

[60] Jencks, "The PRC's Military and Security Policy in the Post-Cold War Era," 227.

[61] Tsung Lan-hai, "CPC decides on its international Archenemy," *Zhengming*, No. 195 (1 January 1994), in FBIS-CHI, 25 January 1994, 4-6; cited in Whiting, 608.

[62] Jencks, "The PRC's Military and Security Policy in the Post-Cold War Era," 227.

Regional security concerns fuel calls from others for greater transparency by the PRC regarding its military. The logic is that transparency builds greater regional confidence.[63] Such calls are slowly yielding results as China has recently started publishing defense White Papers. But transparency conflicts with the Chinese culture of ambiguity, of never giving potential enemies more information than is necessary lest you make yourself vulnerable. While greater transparency could foster greater short term stability prospects, it is unclear that transparency in the longer term aids China's national security. Taken in conjunction with their *Realpolitik*, sovereignty, and relative gains perspectives, transparency must ultimately provide a much greater security gain in the way of increased stability to China to compensate for the loss of sovereignty and the inevitable external meddling military transparency would bring.

4. Energy Resources

Of a growing concern in China's national security equation is the need for energy to support its growing economy. It is expected that China will be a net oil importer by the year 2000 and some argue that this is already the case.[64] The domestic oil infrastructure is aging and scattered, distant from markets and lacking in infrastructure to deliver. Oil fields in northeast China matured years ago and are declining. In the northwest, Xinjiang oil reserves are far from Chinese commercial centers. The politically sensitive South China Sea will be the only potential remaining source of "domestic" oil for China.[65] Disputed are the territorial rights to many parts of the South China Sea, including the Paracel and Spratly Island groups.

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[63] Cossa, "The PRC's National Security Objectives in the Post-Cold War Era," 222-223.

[64] Jencks, "The PRC's Military and Security Policy in the Post-Cold War Era," 248.

[65] Jencks, "The PRC's Military and Security Policy in the Post-Cold War Era," 248; also Whiting, 604.

China insists that it has sovereignty over these groups and much of the seabed in general. The Chinese government maintains that China possesses sovereignty over the South China Sea, but is ready to cooperate with the countries concerned to exploit jointly petroleum and gas.[66] Another Chinese strategist notes:

> for the mid- and short-term, no matter how nuclear energy develops, it will be impossible to change our energy makeup of mostly coal. From a technology and economics perspective, importing clean coal technology will be more in line with China's national and long-range interests. The World Bank projects that, at a 7-percent annual growth rate, China will have to rebuild 80 percent of its industrial production capacity by 2020.[67]

Speculations like these raise concerns that China's need for future energy reserves to continue economic development might result in Chinese aggressiveness or spark confrontations regionally. Insufficient energy resources will negatively affect Chinese economic development. And as already argued, if economic development it is highly likely that domestic unrest will threaten the CCP. In all likelihood, the rapid use of force would be needed out of fears of domestic unrest cascading into a repeat of Soviet, then Russian, ethnic troubles.

C. NUCLEAR WEAPONS AND CHINESE NATIONAL INTERESTS

1. Nuclear Doctrine and Strategy

Considering these security concerns — economics and stability, great power status, regional influence, and energy and resources — nuclear weapons and missile delivery systems contribute to China's national security in three distinct ways. First, nuclear weapons and

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[66] Gao Anming, "Navy to Participate in Economic Reform Drive" [An interview with PLA Navy Deputy Commander Zhang Xusan], *China Daily*, 6 April 1992, 4; cited in Jencks, "The PRC's Military and Security Policy in the Post-Cold War Era," 249.

[67] Wang Yi, "Sino-US Global Game Plan on Energy," *Beijing Zhanlue Yu Guanli* [Strategy and Management], FBIS-CHI-98-103, 13 April 1998.

ballistic missile delivery capabilities innoculate China from its historical problem of being subject to nuclear coercion by other nuclear states. In the 1950s with both the Korean conflict and the Taiwan Strait crises, the United States issued veiled threats of nuclear attack (and sometimes not so veiled) to coerce China into acting according to American regional designs. Similar Chinese fears of the Soviet Union emerged in the late 1960s following the Sino-Soviet split. These historical incidents remain prominent in China's memory and preventing its being the recipient of further nuclear coercive threats is the fundamental concern supporting China's continued possession of nuclear weapons.

Furthermore, nuclear weapons and ballistic missiles also act as a hedge against other states' desires to interfere internally in China. The preceding argument shows the need for these weapons systems, in Beijing's eyes, to negate threats from others regarding either actual or potential state external action on the part of China. These weapons systems also give pause to states who might otherwise be tempted to interfere internally in China's affairs. Two plausible cases would be in the event China needs to act with force within its land borders (another Tiananmen) or with Taiwan. (Would the United States be willing to trade Los Angeles for Taipei?)[68]

Second, Beijing perceives its possession of nuclear weapons and ballistic missile delivery systems as a boost for great power status at a time when other national factors that could individually support that status are inadequate. China's qualitative conventional military capabilities and economics could eventually support great power status on their own merits, but questions remain as to whether these two elements are currently up to that standard and

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[68] Garrity, 47.

whether the pace of economic and military progress can be sustained. Because of China's inadequate conventional power projection capabilities which confine China to largely a regional security player, nuclear weapons and ballistic missile systems ensure that China has extra-regional influence.

Third, nuclear weapons are viewed as a hedge against any degradation of regional stability. Of the fourteen states sharing borders with China, three are in disarray, and others are in poor condition. Particular problems are Tajikistan, North Korea, and Myanmar. Russia is in questionable condition, as is Pakistan. This peripheral uncertainty leaves China uneasy. Some of these states have nuclear weapons while others are believed to be pursuing nuclear weapons and already possess ballistic missile capabilities. China has growing concerns about North Korea's nuclear efforts, Japan's virtual nuclear capability, and India's nuclear intentions.[69] Concerns about the Russian nuclear arsenal also exist, but current conditions reflected by the Sino-Russian strategic partnership subordinate Chinese concerns to concerns about other neighbors. In this context, the idea of deterring neighbors is becoming a far more critical component of both China's national strategy and the Asian security equation.

Despite these three ways in which nuclear weapons contribute to China's security, for the first twenty years of its post detonation nuclear history the PRC has not clearly defined a guiding nuclear weapons doctrine.[70] What little public discussion or comment made prior to

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[69] Despite India's nuclear tests in May 1998, the extent of its nuclear weapons arsenal is uncertain. The motivations surrounding the tests are also disputed.

[70] "Unlike the other nuclear powers, especially those of the West typified by the United States, China has never really enunciated a well defined strategic nuclear doctrine in the manner of the massive retaliation doctrine or the flexible response doctrine declared respectively by the United States Secretary of the State Dulles in 1954 and Secretary of Defense MacNamara in 1962." Chong Pin-Lin, *China's Nuclear Weapons Strategy: Tradition Within Evolution* (Lexington, MA: Lexington Books, 1988),

the mid-1980s by the Chinese regarding nuclear weapon employment (or restraints) served "important polemical and tactical purposes, but skirted fundamental security issues."[71]

In the Cold War era of China's nuclear history, several tenets originated that have become repetitive mantras for the PRC: no-first-use (NFU), defensive purpose, goal of total disarmament, a disdain for "deterrence," and disbelief in a nuclear taboo. The declared policy of never being the first to use nuclear weapons at any time under any circumstances dates from the first nuclear test of October 16, 1964. The NFU pledge has been a public mainstay of the PRC's arms control posture to the present, most recently appearing in negotiations surrounding the CTBT.[72] The Chinese claim "that the benefits of an NFU treaty would include reduced risk of war, enhanced security of the five nuclear-weapon states, greater mutual trust, reduced likelihood of nuclear proliferation, and advancement toward the goal of complete nuclear disarmament."[73] Questions remain as to how much China would actually practice its preaching, since the NFU pledge presents contradictions with its emerging nuclear force strategy. It is also clear that China's NFU pledges in no way apply to Taiwan.[74]

The PRC has also practiced what Lin calls a "slogan-like repetition" regarding nuclear policies. Public statements released by the PRC since the 1960s contain recycled information,

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Endnote #4, 161.

[71] John Wilson Lewis and Xue Litai, *China Builds the Bomb*, with foreword by Sidney D. Drell (Stanford, CA: Stanford University Press, 1988), 196.

[72] Lin, 42.

[73] Garrett and Glaser, 65.

[74] Fisher, 167.

yielding no sign of any evolving or coherent nuclear weapon doctrine.[75] Public statements have yielded no concrete guidelines for nuclear weapon employment; instead Beijing insists on when it will not use nuclear weapons and downplays the possibility of employment.[76]

China publicly rejects the Western concept of nuclear deterrence, although in practice the Chinese nuclear posture exhibits many similarities as well as differences with the nuclear postures of Western states. Publicly, Chinese political and military leaders avoid using "deterrence" to describe the purpose of their own nuclear arsenal, choosing instead to wordsmith its purpose as "defense" and "self-protection." China has not been as explicit about the manipulation of risk as Western governments have been. In Chinese analyses, Western risk-taking behavior is considered a path to miscalculation and inadvertent nuclear war.[77] Despite China's denials, its nuclear defense efforts amount to deterrence.

It is argued by some that as the nuclear era has progressed from 1945 a prohibition against the use of nuclear weapons has crept into the international arena — a nuclear taboo — including a prohibition against the use of nuclear weapons against non-nuclear states.[78] China dismisses this normative taboo on a couple of counts. The Chinese believe it is possible to achieve political goals through the use of nuclear weapons despite the consequences typically associated by normative taboo proponents with nuclear weapons use such as

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[75] Lin, 43, 69; Lewis and Xue, *China Builds the Bomb*, 195.

[76] Lin, 43.

[77] Johnston, "China's New 'Old Thinking'," 11-15.

[78] T.V. Paul, "Nuclear Taboo and War Initiation in Regional Conflicts," *Journal of Conflict Resolution* 39, No. 4 (December 1995), 699.

environmental devastation and international condemnation. This Clausewitzian distinction provides the basis for China's belief that graduated escalation control is possible.[79]

Another reason for China's dismissal of the normative taboo reflects also its criticism of Western mutually assured destruction (MAD). "If a state is incapable of using nuclear weapons short of provoking mutual suicide, then deterrence threats are not credible."[80] China insists that a state in possession of nuclear weapons must have the will to use those weapons in combat, or else the touted deterrent effect is lost.[81] But, if the Chinese do not subscribe to the concept of MAD, then a problem exists in the nuclear deterrence equation, especially in light of the United States and Russian arsenal reduction efforts through START I, II, and III.

For most of the PRC's Cold War nuclear history, Western experts on Chinese security diagnosed the PRC's nuclear strategy as one of "minimal deterrence", which is "a strategy to deter a rational attack by relying on a small strategic nuclear force capable of inflicting very limited, and yet unacceptable, damage to an enemy." This diagnosis of minimum deterrence remained the leading, but still disputed, assessment through the end of the Cold War. Yet, minimum deterrence was (and is) denounced by Beijing as "inadequate to deter anything much more than a countervalue first strike."[82]

Minimum deterrence does not accurately categorize Chinese nuclear strategy in the post-Cold War period. Lin claims the PRC's efforts to acquire a tactical nuclear capability,

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[79] Johnston, "China's New 'Old Thinking'," 13.

[80] *Ibid.*, 14.

[81] *Ibid.*, 16.

[82] Johnston, "Prospects for Chinese Nuclear Force Modernization," 554.

as well as efforts to expand the qualitative spectrum of nuclear weapons and interest in defense-in-depth concepts contradict a minimum deterrence assessment.[83] In Johnston's view, China's nuclear strategy has evolved to one of limited warfighting, defined as:

> ...the development of enough capabilities to deter conventional, theatre and strategic war and to suppress escalation during a nuclear war. This requires a sufficient range of weapons and operational capabilities, essentially, to respond to any level of attack. The response need not be a one-to-one matching of technical capabilities, merely enough to raise the costs of war dramatically for the adversary. A recognizable, realistic ability to fight and inflict sufficient counterforce and countervalue damage on an aggressor assures deterrence; and if that fails, it assures an ability to prevent an enemy victory.[84]

Johnston argues the limited warfighting strategy because of five dimensions of Chinese nuclear forces: first, China rejects MAD in favor of controllable escalation; second, a credible ability to fight a nuclear war and achieve their political goals; third, a diverse targeting doctrine that is only becoming more complex and diverse as missile force improvements occur; fourth, a survivable nuclear force, which has been the case since the early 1980s when China first established its second-strike capability; and fifth, a growing emphasis on preemptive strike, be it nuclear or conventional.[85] Lin also argues that China's nuclear strategy fits the war-fighting concept better than the minimum deterrence concept, although the war-fighting concept, too, is insufficient to describe their strategy. Of ten components of a war-fighting nuclear strategy, Lin argues that China does not even meet half.[86]

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[83] Lin, 112-119.

[84] Johnston, "Prospects for Chinese Nuclear Force Modernization," 555.

[85] Johnston, "Prospects for Chinese Nuclear Force Modernization," 555-557.

[86] The ten components are: Diversification, combined arms, nuclear tactics, civil defense, postnuclear warfare, massive arsenal, counterforce targeting, survival of C^3I, strategic and air defenses, and winning. China meets the first four of these only. Lin, 119-123.

Surrounding assessments of the PRC's nuclear doctrine and strategy is China's continued reliance on traditional deception and ambiguity. "Ambiguity consists of massive concealment, or secrecy, peppered with revelation — selective, deliberate, and at times redundant." Lin summarizes this characteristic as, aptly, "artful."[87] Efforts to determine China's nuclear doctrine reveal deceptive measures, saying one thing while enacting another. Johnston asserts "the [Chinese nuclear] doctrinal ambiguity was *deliberate*, designed to keep potential adversaries guessing about the form, timing and targeting of Chinese retaliation in the event of nuclear attack."[88] Johnston additionally notes that during "the last few years as Chinese strategists have indeed produced more scholarship and analyses of nuclear doctrine, the deliberate ambiguity claim is more credible, as relatively few of these analyses are in open circulation material. A number of Chinese scholars, long associated with China's nuclear weapons programme, have claimed that the lack of doctrinal transparency today is deliberate."[89] Nuclear force composition, modernization, and deployment provide the means to penetrate the ambiguities and deception through the added benefit of being able to distinguish between expressed visions and operational practice.[90]

2. China and Post-Cold War Nuclear Arms Control

China's possession of nuclear weapons ultimately creates greater dilemmas for its national security. Because of their persistence in trumpeting state sovereignty, the

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[87] *Ibid.*, 68-69.

[88] Johnston, "Prospects for Chinese Nuclear Force Modernization," 553; emphasis added.

[89] *Ibid.*, Footnote #13, 553.

[90] Lin, 8.

multilateralism of the nuclear arms control and nonproliferation regimes poses problems. A tradeoff occurs, a paradox of sorts, in that China possesses nuclear weapons to ward off coercive threats and external meddling in its domestic affairs and at the same time it invites that meddling in national security with these regimes. China's increased participation in nuclear arms control negotiations and commitments is used to counter any *Realpolitik* assessment of PRC behavior. Such arguments against *Realpolitik* claim that the PRC's arms control and disarmament behavior in the post-Cold War period — which includes accession to the NPT, signing the CTBT, and the imposition of a nuclear testing moratorium — reflect an interdependence and multilateral character, not power politics. But China's participation in these agreements and forums reflects the *growing* influence of interdependence on Beijing and the motivations for participating in each case reflect relative security gains. One such motivation is perceiving the need to check a qualitative arms race with the West.[91] China's involvement in multilateral arms control programs is largely a form of *Realpolitik*, to either take advantage of relative gains or mitigate the negative consequences of international momentum, not a multilateral perspective.[92]

China wants to keep its nuclear forces out of the arms control and disarmament arena as long as possible. China's fast retreat on its Comprehensive Program for Disarmament in the 1980s, its handling of its involvement in the CTBT negotiations, and the growing problem with China's expressed stand on superpower strategic arms reduction are evidence of a disconnection between public advocacy of arms control measures and ponying up to their

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[91] Malik, "China's Policy Towards Nuclear Arms Control," 14.

[92] Garrett and Glaser, 44.

advocacy words.[93] Malik notes that China's arms control strategy reflects desires to increase China's capabilities relative to the other nuclear powers, avoid both bilateral and multilateral processes if possible, shift views of regional security from the nuclear issue to security in general, and conduct a public arena "spin" that tells the world what it wants to hear while China acts in a completely different manner.[94]

In the post-Cold War period, three significant arms control regimes have factored into Chinese nuclear strategy: the NPT, the Missile Technology Control Regime (MTCR), and the CTBT. Two other areas, arms reduction treaties and nuclear disarmament, have played lesser but still important roles in Chinese national security strategy.

a. Nuclear Non-Proliferation Treaty

China acceded to the NPT on 9 March 1992; a surprising development because of China's previous persistent charges of discrimination by the NPT against non-nuclear, developing states.[95] A reassessment of the security threats posed by potential nuclear neighbors generated the shift in policy, and was due to reluctant need, not any shift from a *Realpolitik* perception. Growing awareness of the consequences nuclear proliferation poses for Chinese security has been slowly changing China's nonproliferation perspectives. Nuclear proliferation will generate new need for regional balances among states, sparks fears of nuclear states ganging up on China, prospects for uncertain nuclear status and capabilities, even to the

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[93] Malik, "China's Policy Towards Nuclear Arms Control," 5.

[94] *Ibid.*, 8-9.

[95] "Chinese analysts remained critical of the NPT for its failure to prevent the United States and Russia from engaging in vertical proliferation of their nuclear arsenals while seeking to restrict horizontal proliferation to the developing world, and for its discrimination against non-nuclear countries seeking to develop nuclear power." Garrett and Glaser, 50.

point of not knowing or suspecting nuclear possession, which China particularly fears of Japan.[96] Beijing considers that the most likely place where nuclear weapons would be used is South Asia, in a conflict between India and Pakistan.[97] Nuclear potential in North Korea, Japan, and Taiwan triggered the realization in China of the merits of the NPT. By embracing the treaty and associated regimes, China aims to slow the prospects for regional proliferation detrimental to its security while securing the ability to have some influence in the system. The Chinese perception is that the world is fast moving in the direction of complex, multiple nuclear deterrence, and that nuclear proliferation is inevitable. If this is true, membership in the NPT can only be seen as an attempt to slow proliferation, not prevent it.[98]

The level of China's commitment to the NPT is questionable, however, in light of its evasiveness, mincing of words, and unsafeguarded nuclear assistance (e.g., to Pakistan and Iran). Only recently has China retreated from nuclear cooperation with Iran. This retreat stemmed more from the desire to improve Sino-American relations, the inability of Iran to pay, and a growing appreciation for stability in the Middle East, which keeps oil prices low, than from concern for compliance with the NPT commitment.[99] "The fact is that the Chinese

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[96] Malik, "China's Policy Towards Nuclear Arms Control," 15.

[97] Garrett and Glaser, 51.

[98] Malik, "China's Policy Towards Nuclear Arms Control," 14-15.

[99] Shirley A. Kan, "China's Compliance with Nonproliferation Commitments," Speech delivered on 21 January, 1998 before the Nonproliferation Policy Forum on US-China Nuclear Cooperation, 4.

continue to circumvent the NPT guidelines if doing so serves their strategic and economic interests."[100]

The bureaucracy responsible for managing Chinese nuclear arms control efforts is also rife with contradictions and inefficiencies. Two of the three nuclear agencies tasked with arms control management contain a conflict of interest in that Jiang Xinxiong heads both the China Atomic Energy Authority, which is responsible for nuclear nonproliferation, and the China National Nuclear Corporation, which promotes nuclear exports.[101] The organizations which are involved in the missile trade are controlled by the military, "which is always willing to either bend the rules or turn a blind eye in securing lucrative foreign orders."[102]

China's desires to restrict the growth of international norms stem from their state sovereignty concerns and are reflected in both their testing of the limits of agreements they've committed to, as well as in their non-compliance with other existing multilateral agreements that they have not signed. Pressure on Beijing to not only adhere to the agreements already committed to, but to join additional arms control regimes that portray arms control agreements as international norms is counterproductive. This is exactly why China remains cool toward such regimes. Strong relative gains, regionally or globally, or prospects for detrimental negative effects if China does not comply must be shown before China will engage in such processes.[103]

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[100] Malik, "China's Policy Towards Nuclear Arms Control," 29.

[101] Kan, 2.

[102] Malik, "China's Policy Towards Nuclear Arms Control," 29.

[103] Kan, 3.

b. Missile Technology Control Regime

The MTCR poses a slightly different problem for Chinese security. Unlike other multilateral arms control agreements, China was specifically excluded by the United States from MTCR drafting processes due to US concerns toward Chinese access to sensitive missile design information. The result is that although the MTCR has been in effect since 1987, China is not officially a member. Nevertheless, in February 1992 Beijing agreed to abide by it.[104]

As with its interpretations of the NPT, China uses loose interpretations of the MTCR missile and technology restrictions, if not ignoring them outright, which generates questions regarding the level of Beijing's commitment. Apparently,

> China transferred 300-km-range M-11 short-range ballistic missiles to Pakistan in violation of its commitment.... China also appears to be aiding Pakistan in building a plant to manufacture M-11 missiles or copies of them....There is additional concern that Pakistan is developing a medium-range ballistic missile called the Ghauri, as confirmed by the recently departed director of the CIA's Nonproliferation Center. China may be providing assistance in that effort.[105]

But at the time of the transfer, China argued that the M-11 met the MTCR guidelines which restricted the transfer of missiles with a range of greater than 300 km and a payload of greater than 500 kg. (The M-11 range was advertised at less than 300 km, but the United States alleges that, with a lighter warhead, the range can easily be exceeded.) What resulted was a change to the MTCR guidelines in January 1993 to extend transfer prohibitions to any missile that could be used to deliver weapons of mass destruction.[106]

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[104] *Ibid.*, 1.

[105] *Ibid.*, 3.

[106] Robert G. Sutter, *Chinese Nuclear Weapons and Arms Control Policies: Implications and Options for the United States*, Congressional Research Service Report for Congress 94-422S (25 March, 1998), 18-19.

The Chinese view the MTCR as yet another discriminatory arms control regime designed to codify the capabilities gap between the developed West and the rest of the world. Aircraft and ground (tactical) delivery methods are left unaddressed by the MTCR, resulting in an accompanying double standard charge since highly developed countries possess a substantial advantage over others in this regard, making it nearly impossible for a developing country to stave off coercion from the privileged few. The M-9 missile, the export variant of the DF-15 used in the 1995-1996 Taiwan Strait episodes, meets neither the original nor the revised January 1993 MTCR standards (its range exceeds the 300 km of the less restrictive original MTCR standard), raising questions about China's commitment to the entire regime.

c. Comprehensive Test Ban Treaty

The CTBT is not currently in China's interests, as it complicates the modernization of its nuclear forces by impeding research and development of smaller and lighter warheads which might be used in multiple independently-targeted reentry vehicle (MIRV) delivery systems and tactical nuclear weapons. The CTBT also becomes one more shackle on China's sovereignty in the security realm. The problem is that China can neither back out of the regime or try to kill it. The CTBT is championed by non-nuclear-weapon states to constrain the evolution of nuclear weapons, impede proliferation, and possibly reverse the numbers and sizes of nuclear arsenals while advancing toward nuclear disarmament.

Delaying tactics were imposed to stretch out treaty negotiations, including Chinese insistence on inclusion of a provision allowing for an exemption for peaceful nuclear explosions (PNEs) and on inclusion of language committing parties to the CTBT to a NFU pledge. Both provisions were eventually dropped and China did sign the CTBT in September

1996, after the United States signed. China has not yet ratified the treaty, and will likely wait to do so until the latest possible moment. Apparently, the delays permitted the completion of the necessary Chinese nuclear testing for the latest round of modernization, and Beijing announced a testing moratorium two months prior to its signing the CTBT.

d. Strategic Arms Reduction Treaties

China is not a partner to any nuclear arms reduction agreement, nor a participant in any reduction agreement negotiating process. Beijing has been quite clear that before China will consider becoming involved with any nuclear arms reduction talks, the arsenals of the other declared nuclear weapons states must first be reduced to a relative equality with China's, meaning the same magnitude of hundreds of warheads vice their current thousands.[107]

But China has made such commitments before and quickly walked away when the conditions the commitment was predicated upon actually emerged. In 1979 China committed itself before the UN to join in disarmament negotiations once "substantial" progress in arms reductions had occurred between the United States and Soviet arsenals. Three years later "substantial" became a 50 percent reduction. But once 50 percent reduction targets became the context of arms negotiations between the superpowers in 1986, China quickly reverted to its pre-1979 position.[108]

Nuclear weapons are political tools that give China a status in world affairs disproportionate to its actual economic and military capabilities.[109] As long as Beijing assesses

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[107] Garrett and Glaser, 71.

[108] Malik, "China's Policy Towards Nuclear Arms Control," 5.

[109] *Ibid.*, 23.

China's great power status below that which it desires on the considerations of its economic and conventional military capabilities, Beijing will do nothing that will jeopardize the value of its nuclear capabilities. This current prerequisite for five-party nuclear arms reduction talks is only a delaying tactic. It will be quite some time before both the United States and Russia are willing (if ever) to meet this condition of relative arsenal equality, and so Beijing feels it has evaded any negotiations commitment by raising the bar impossibly high.

e. Disarmament

Although China sees the critical necessity for possessing nuclear weapons, it has repeatedly expressed desires for global nuclear disarmament. Such a stand does not contradict its current possession of nuclear weapons. The motivations underlying such persistence include mobilizing the support of the non-nuclear developing world by staking a moral position in opposition to the position of the four other declared (and Western industrialized) nuclear states. Some argue that "with a CTBT agreement behind them, such Chinese proposals for denuclearization provide Beijing with international credibility among the anti-nuclear constituency at the immediate sacrifice of no particular program or policy of its own. The main impact would be on the United States and its traditional policy of extended deterrence."[110] As long as nuclear weapons are in the possession of any state, China sees the need and will possess them as well.

Ideally, global nuclear disarmament would raise Chinese regional and global influence in several ways. First, conventional forces become the exclusive measure of state security, and the weight of numbers in conventional forces heavily favor China, even when matched with

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[110] Garrity, 64.

Russia. Two, international repercussions for using conventional force coercion are considerably less severe. Three, China gains a legitimate global coercive ability in that the most significant impediment to the use of conventionally armed ballistic missiles, especially ICBMs, would be removed. As long as nuclear weapons exist, any unannounced ICBM launch is presumed to be nuclear on the part of nuclear states (especially the US and Russia), potentially precipitating unintended nuclear escalation. In a world without nuclear weapons, ballistic missiles are released from this restraint on their use and, as a result, China gains a long-range precision strike capability without the need for an extensive forward naval or air force presence.

D. SUMMARY

Chinese perceptions of the current international environment are filtered through the lens of *Realpolitik*, influenced slightly by economic interdependence theories. Driving its national security agenda is the necessity to maintain the Communist Party's legitimacy through continuation of China's remarkable economic growth, domestic stability and regional stability to allow continued economic growth, building great power status and a *de facto* regional hegemony, and the guarantee of sufficient resources, especially energy resources, to keep Chinese economic (and therefore military) development moving.

Nuclear weapons are currently in the background of Chinese and Asian security concerns. China is modernizing its nuclear force at a deliberate pace, with the intent of closing the qualitative gap between China and the West. China would prefer to avoid arms control constraints but increasingly must incorporate them into its overall national security strategy.

Chinese actions demonstrate that nuclear weapons remain a key part of China's national security strategy.

III. US BALLISTIC MISSILE DEFENSE PROGRAMS

The United States ballistic missile defense program began in the late 1940s. Today, the Department of Defense's Ballistic Missile Defense Organization (BMDO) is responsible for the research and development of both theater missile defense (TMD) and national missile defense (NMD) capabilities. TMD and NMD are meant to deter and, if necessary, counter the use of ballistic missiles, whatever the warhead type — nuclear, chemical, biological, or conventional. According to the BMDO, theater missile defense is needed "to protect US forces, US allies, and other important countries, including areas of vital interest to the United States from theater missile attacks."[111]

A. THEATER MISSILE DEFENSE PROGRAMS

The United States TMD effort is focused on four areas: attack operations, active defense, passive defense, and battle management/command, control, communications, computers, and intelligence.[112] The pursuit of TMD (and NMD) capabilities reflects US pragmatism. As an aspect of the revolution in military affairs (RMA), these capabilities represent for the most part proven technology, implying to date only marginal modifications to operations and organization. TMD involves "bottom-up" capabilities. Once the TMD capability is achieved, the appropriate unit level tactics, theater level operations, and organization at all levels — tactical, operational, and service — are constructed concurrently or afterward. This includes BMD C^3I.

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[111] *1997 Report to the Congress on Ballistic Missile Defense*, 2:1.

[112] *1997 Report to the Congress on Ballistic Missile Defense*, 2:1.

The four core programs of TMD are: the Patriot Advanced Capability-3 (PAC-3), Navy Area Theater Ballistic Missile Defense, Theater High Altitude Area Defense (THAAD), and Navy Theater Wide Ballistic Missile Defense.[113] The PAC-3 program is one of two core lower-tier, endoatmospheric ballistic missile defense systems under development. Land-based, PAC-3 is intended to counter short range (SRBM) and medium range ballistic missile (MRBM) threats in theater, effecting kills in the terminal phase of ballistic missile flight. The cruise missile threat and aircraft threat — be it fixed or rotary winged — are also subjects of PAC-3 defense.

PAC-3 is proceeding through three configurations. The first, consisting of BMC^3I improvements and the guidance enhanced missile (GEM), was completed and fielded in 1995. The second is being fielded after demonstrating a successful theater ballistic missile intercept in February 1997. The third and final configuration is still in development, consisting of the PAC-3 interceptor missile.

In all three configurations, PAC-3 is designed to be a rapidly deployable, air-transportable system consisting of four main components: the launcher, the interceptor missile, the radar unit, and the system control station. Operations in the 1990-1991 Gulf War and deployments in 1994 to Korea indicate how much time actual deployments have required. In the Gulf War, the first Patriot battery arrived 34 days after mobilization, and the second by the 84th day. In 1994, the Commander of US Forces, Korea, needed four months to get the request for Patriot batteries processed, and another 40 days to receive and deploy them. In

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[113] There are other US TMD programs, such as the Medium Extended Air Defense System (MEADS) and the Air Force's airborne laser, but the Ballistic Missile Defense Organization has not designated them as "core" programs.

both cases, an inordinate amount of precious airlift capacity was needed to deliver the systems.[114]

The Navy Area Theater Ballistic Missile Defense program is the second core lower-tier TMD program, also targeting SRBMs and MRBMs in the ballistic missiles' terminal phase. It is sea-based, relying on the AEGIS combat system on cruisers and destroyers along with a specially modified version of the SM-2 surface-to-air missile — the SM-2 Block IVA. Navy Area TMD provides increased positioning freedom for the unified commanders since the delicate issue of political support by a host nation in theater does not arise.

The Theater High Altitude Area Defense is one of two core upper-tier TMD programs with planned endo- and exoatmospheric kill capabilities. Like PAC-3, which it is intended to complement, there are four components: a truck-mounted launcher, missile interceptor, radar unit, and control station.

Unfortunately, THAAD is experiencing several setbacks in development. The last five interceptor tests were failures. Internally contaminated electronic amplifiers are said to have caused seeker failures. A three month delay to correct the problem means that the next test of the THAAD interceptor should occur in the first quarter of calendar year 1999.

The Navy Theater Wide TMD program is the second core upper-tier system. Unlike the PAC-3 and THAAD concert, this program is to be the follow-on to the Navy Area lower-tier system, using a new SM-3 interceptor. To have endo and exoatmospheric kill capability as well, the Navy Theater Wide program is expected to have ascent and midcourse kill

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[114] Scott C. Truver, "The Threat is Real...And so is the US Navy Theater Ballistic Missile Defense," *Jane's Navy International* 103, No. 8 (October 1998), 25.

capability in addition to the terminal phase capability. It "can rely both on ship radars and satellites, has more than a 1,000-mile range, and can hit fast missiles."[115]

Built around deterrence by denial, the United States' BMD strategy has three key components: first, the four core TMD programs; second, foreign military sales of TMD to strengthen allies in their efforts to contend with the ballistic missile threat; third, aggressive international coordination and consultation on counter-proliferation and non-proliferation of ballistic missiles.

The Army, emphasizing the need to dominate the maneuver battlefield, is focusing on the concert of rapidly deployable land-based TMD systems consisting of PAC-3 and THAAD. The Navy, with its forward presence and power projection priorities, is pursuing flexibility through the evolution of the AEGIS combat system with two shipboard TMD systems. The Marine Corps program emphasizes point defense with the HAWK system.

The Air Force is pursuing "advanced technology for air dominance." Advanced technologies such as the Boost Phase Intercept (BPI), critical to both THAAD and Navy Theater Wide upper-tier systems as well as the NMD Ground Based Interceptor (GBI), and research and development of airborne and space-based lasers keep Air Force efforts behind the scene and with a longer-ranged vision. Projects designed to improve target identification, interceptor tasking, and targeting are also within the purview of the Air Force.

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[115] Robert E. Harkavy, "Triangular or Indirect Deterrence/Compellence: Something New in Deterrence Theory?" *Comparative Strategy* (January-March 1998), 76.

B. NATIONAL MISSILE DEFENSE PROGRAM

More controversial than TMD, national missile defense is more sweeping in vision, longer-ranged, and less certain in its development. It is also, surprisingly, less complex in its structure than the joint TMD programs.

Like the TMD programs, NMD is being built around the idea of hit to kill — kinetic impact with the incoming ballistic missile or its warheads. At one point it was thought that modified Minuteman II missiles would suffice for first generation interceptors, but through reliance on off-the-shelf technology and competing contracts, construction of an expressly designed interceptor — the ground-based interceptor — has proven less complicated and less expensive. Because of the program's longer-ranged vision and more politically sensitive nature, NMD is further behind in research and development than the TMD systems. Verifications of the interceptor exoatmospheric kill sensor and evaluation of contractor systems resulted in awarding Boeing the interceptor contract in early 1998. Like the land-based TMD systems, the NMD system will have four main components: launcher, interceptor, radar unit, and a command unit.

In 1996, the "3+3" concept emerged as the defining map for NMD research and development. Taking the program through the year 2003, "3+3" involves first a three year development and planning phase, then a three year system development and deployment phase.[116] The controversy surrounding NMD yielded the "3+3" concept. Some observers have characterized it as a way to appease those opposed to NMD (since there is no

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[116] *1997 Report to the Congress on Ballistic Missile Defense*, 3:1.

commitment to deploying such a system) and a way to appease NMD supporters (because the program is proceeding, albeit slowly).

C. INTERNATIONAL BMD PARTNERSHIPS OF REGIONAL CONCERN

Several international partners are assisting or may join the United States in BMD research and concept development. The most significant contributions come from North Atlantic Treaty Organization (NATO) members. As for the Asia-Pacific community, however, only five states are of particular interest: Japan, Australia, Russia, South Korea, and Taiwan.

The US-Japan BMD relationship is the most controversial for the Chinese. Japan committed itself to joint TMD research and development efforts with the United States on 30 September 1998. The Japanese decision concluded a delay lasting for months and was made just weeks after North Korea launched a Taep'o-dong 1 IRBM that not only penetrated Japan's airspace, but overflew one of its islands.[117] Beyond this recent BMD research and development agreement, a shared early warning agreement exists.[118] However, Australia is the most significant contributor to the BMD research effort in the Western Pacific, focusing on space and ground-based early warning efforts, as well as ballistic missile command, control, and communications.

The Russian program is probably the one closest to missile defense actualization. The Russian government already possesses a limited BMD capability, but cooperation with the

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[117] Kensuke Ebata, "Japan Joins USA in Theatre Missile Defense Research," *Jane's Defense Weekly*, 30 September, 1998, 3.

[118] *1997 Report to the Congress on Ballistic Missile Defense*, 7:4-5.

United States involving basic and applied research programs promises improvements which could make Russia less vulnerable to nuclear deterrent threats.

South Korea is not participating in the research and development process, but it does host the PAC-3 system which has been deployed in South Korea under the control of US forces to deal with North Korean missile threats.

Overshadowing these cooperative efforts with the United States, China remains vigilant regarding Taiwan and US pressure for the island to join in the BMD effort. David Lee, Taiwan's deputy foreign minister, recently expressed reservations about Taiwan's partnership in the BMD endeavor. "We are interested in this idea and we are willing to discuss it with the United States. But it is still in the conceptual stage, so we don't know how much it will cost or whether this is the correct approach....We'll never rule it out, but it is too early to say if we will participate."[119] Taiwan's Air Force Chief of General Staff, General Tang Fei, expressed interest, however, in two of the US TMD programs: Patriot PAC-3 and Navy Area Theater Ballistic Missile Defense.[120]

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[119] Barbara Opall-Rome, "Taiwan Resists Call to Embrace TMD...," *Defense News* (November 30-December 6, 1998), 4.

[120] *Ibid.*

IV. ASSESSING US MISSILE DEFENSE AND SINO-AMERICAN RELATIONS

A. PLA STRENGTHS AND MISSILE DEFENSES

1. The 1996 Taiwan Strait Crisis

One of the most problematic regional security situations in East Asia is the dispute between the PRC and the Republic of China (Taiwan). Retaining claims to the island is not just a matter of territorial cohesion for the PRC. It is also a matter of Chinese Communist Party (CCP) legitimacy. Although it may not be the most pressing regional flash point, the Taiwan issue promises to be a larger scale (and longer-term) problem than the crisis on the Korean peninsula because it holds a greater potential for major-power confrontation (US-China).

In 1950 Beijing's reluctant consent to North Korea's plans for the forced reunification of the Korean peninsula generated an unexpectedly strong response led by the United States. The United States took action to prevent a Chinese invasion of Taiwan while the Korean conflict raged. The United States also confronted the PRC militarily three times during the 1950s in the Taiwan Strait regarding the PRC's differences with Taiwan. Two Taiwan Strait crises involved both implicit and explicit threats of nuclear force from the United States toward the mainland.[121] Though the PRC backed down, intermittent shelling of Taiwanese-held offshore islands continued through 1979, ceasing when the United States normalized relations with the mainland. PRC rhetoric then shifted to "peaceful reunification" with Taiwan. In the post-Cold War era, however, China's "liberation" rhetoric resurfaced and in 1996, the PRC-Taiwan dispute again threatened to become an armed conflict.

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[121] Lewis and Xue, *China Builds the Bomb*, 1-34.

Historically, any external interference in Taiwanese affairs has elicited charges by the PRC of tampering in China's internal affairs. The 1996 tensions capped a progression of several such events. In 1992, President Bush agreed to sell 150 F-16 fighters to Taiwan, reversing policy against arms sales to Taiwan established by the Reagan Administration in 1982. In 1994, President Clinton, who had campaigned fervently for a tougher US posture toward the PRC on human rights and trade practices, changed the official US protocol status accorded to Taiwanese government representatives, allowing them to receive official state treatment. Clinton also enabled US government representatives to receive Taiwanese officials in US government offices, changing a policy set in 1972 by the Nixon Administration. Taiwanese President Lee Teng-hui visited the United States in June 1995, attending his college reunion at Cornell University. This visit particularly angered the PRC. Since 1972, no Taiwanese head of state had received authorization to visit the United States.[122] Other instances involved Taiwanese-French arms deals. In 1995, mounting pressure for independence on the part of two influential Taiwanese political factions precipitated a reaction from China. In response to the growing independence movement, the PRC directed increasingly hostile rhetoric toward Taiwan. The PRC could not, in its estimate, let the Taiwanese independence situation deteriorate further.

The Chinese found opportunities to express their dissatisfaction in the fall of 1995 and spring of 1996. In December 1995, democratic elections for the Taiwanese national assembly would occur. On 23 March 1996, Taiwan would be conducting a presidential election. The latter election would be the first in which an ethnic Chinese society chose its head of state by

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[122] Nathan and Ross, 73-74.

secret universal franchise. It would also put current President Lee Teng-hui, a pro-Taiwanese moderate, against the more radical pro-Taiwanese independence Democratic Progressive Party (DPP) candidate Peng Ming-min, and Chinese appeasement candidates Lin Yang-kang and Chen Li-an. The March 1996 presidential election essentially would be a referendum for the Taiwanese people about *de jure* Taiwanese independence.

In early January 1996, former US Assistant Secretary of Defense Charles W. Freeman Jr. learned of detailed invasion plans China had made for use against Taiwan that merely awaited CCP approval for implementation. Although such plans are expected from any military staff, which typically plan for a diverse range of eventualities, the admission of the existence of these plans and the intentional passing of this particular information to senior US leaders through Freeman was unusual, and amounted to a trial balloon floated by the PRC in an attempt to gain insight into possible US resolve.[123] In conjunction with this revelation, a December 19-20, 1995, transit of the Taiwan Strait by the *USS Nimitz* was disclosed. This was unusual because US warships rarely transit through the Taiwan Strait, yet such action was not out of character. Although the US Department of Defense said the transit was due to weather concerns, some observers speculated that the United States expressly designed this particular transit to be a "freedom of navigation" statement as well as a demonstration of US concern about mounting tensions.

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[123] Julian Baum and Matt Forney, "Strait of Uncertainty," *Far Eastern Economic Review*, Feb 8, 1996, 21.

Shortly thereafter, an unexplained attack by a Chinese-flagged vessel on a Taiwan-owned freighter occurred more than 70 kilometers off Taiwan's southern coast in the Bashi Channel (300 kilometers off the Fujian coast). This attack escalated tensions.[124]

In the summer of 1995 China conducted missile tests that continued into the fall in an effort to influence the Taiwanese national elections in December. On 5 March 1996, Beijing announced that it would again be conducting missile tests in the Taiwan Strait, this time during the week preceding Taiwan's presidential election, March 8 through March 15. The tests would involve firing suspected nuclear-capable DF-15/M-9 (CSS-6) surface-to-surface missiles into two zones, one a mere 32 to 64 kilometers from Taiwan's Keelung Harbor. China fired three M-9 missiles into the announced target zones shortly thereafter, one to the northeast of Taiwan, and two to the southwest.[125]

On 9 March 1996, the PRC closed a large section (6,000 square miles) of the Taiwan Strait for conducting live fire exercises along with the missile tests. The extent of the closure area marked the first time such a large portion of the Taiwan Strait has ever been closed. These exercises began three days later. A fourth missile, accompanying the live fire exercises, landed in the target area southwest of Taiwan. The live fire exercises stopped on March 25.

US reactions began with the Congress first, followed by an administration forced to act. House Speaker Newt Gingrich issued a statement on 9 March 1996, saying, "The US must stand ready to join Taiwan in her defense against any resort to force or other forms of

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[124] *Ibid.*,20.

[125] Patrick E. Tyler, "China Warns US to Stay Out of Taiwan Feud," *The New York Times*, 11 March 1996, A6.

coercion that would jeopardize her security."[126] The following day the Clinton Administration responded as well through Secretary of State Warren Christopher and National Security Advisor Anthony Lake, who each condemned China for taking reckless action. Secretary of Defense William Perry expressed a similar view on March 11.[127] Meanwhile, two American aircraft carriers, the *USS Nimitz* and *USS Independence*, were dispatched nearby. The *USS Independence*, home-ported in Japan, arrived in a matter of days. The *USS Nimitz*, finishing a deployment to the Persian Gulf, arrived a week and a half later. The dispatching of the *Nimitz* to the Taiwan Strait from the Persian Gulf required "gapping" aircraft carrier coverage of the Middle East, a rare event and a strong statement of American concern in itself.

The Taiwanese presidential election resulted in a mandate for current President Lee Teng-hui, who received 54 percent of the vote. The second place finisher, DPP candidate Peng Ming-min, received 21 percent. Combined, these two "Taiwan first" candidates managed 75 percent of the vote. The PRC's missile tests merely resulted in a shifting of votes between Peng Ming-min, the pro-independence candidate, and the relatively more patient "wait-and-see" Lee.[128]

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[126] Nigel Holloway, "Strait Talking," *Far Eastern Economic Review*, 21 March 1996, 16.

[127] *Ibid.*, 16.

[128] Julian Baum, "Tough Mandate," *Far Eastern Economic Review*, 4 April 1996, 14-15. "KMT President Lee sees reunification with the mainland as a long term goal, to be reached when China (PRC) becomes democratic." V. G. Kulkarni and Julian Baum, "Biting the Ballot," *Far Eastern Economic Review*, 14 March 1996, 19.

As far as the PRC's actions are concerned, no international law was violated.[129] Instead, Beijing "created the maximum sense of pressure and alarm on Taiwan without exceeding the boundaries of what a sovereign state is allowed to do."[130] It is highly unlikely with the PRC's current economic concerns that Beijing would pursue options which would unquestionably violate international law and consequently draw international condemnation. Only if Taipei declared independence would Beijing risk international condemnation.[131]

The PRC does not have the necessary forces to conduct an amphibious invasion of Taiwan. The PLA may outnumber Taiwanese forces by a ratio of 10:1, but it lacks the capacity necessary for effective power projection of this nature. China has enough landing craft to place several thousand troops on Taiwan in a single amphibious attack, but these landing craft would be poorly protected from aerial bombardment during the process.[132]

Beyond common sense vigilance toward China, a US effort to undermine Chinese stature (or contain it) could in the long term create greater US security problems. The dilemma here requires assessing which type of China would be more problematic down the road, one that is more integrated into the world community but that is also economically and militarily more powerful, and perhaps capable of effectively projecting force onto Taiwan, or

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[129] Kenneth G. Lieberthal, quoted by Patrick E. Tyler, "War Games Off Taiwan To Expand, Beijing Says," *The New York Times*, 10 March 1996, A12.

[130] Tyler, "War Games Off Taiwan to Expand," A12.

[131] Holloway, "Playing with Fire," *Far Eastern Economic Review*, 14 March 1996, 21.

[132] *Ibid.* Moving at a 15 knot maximum, the transit of the Taiwan Strait alone would take six hours.

one that is frustrated and challenged on numerous fronts through containment actions by other powers.

Taiwan is the most problematic territorial dispute for China. "Of all the issues of territorial integrity, Taiwan carries the highest risk of Chinese failure."[133] After 1999, when Macao is returned to China, Taiwan will remain the only significant territorial challenge, compounded in its difficulty from the Chinese perspective by Western interference. "The autonomy of Taiwan is a thorn in the pride of China since it is both a reminder of Japan's past aggression and a symbol of American strategic primacy in Asia."[134] Nathan and Ross contend that, "without the American defense commitment, Taiwan's bargaining position would be more like Hong Kong's, and Taiwan might have been integrated into the PRC long ago. This is why Beijing considers that the heart of the Taiwan problem is not Taiwan's separation from the mainland, but the American role in perpetuating it."[135]

2. Chinese Ballistic Missile Programs

To say that China has become a global nuclear power is misleading. It has a limited global reach capability but its arsenal is primarily one of a regional nuclear power and its modernization efforts reinforce this. Approximately ten percent of the missiles in China's arsenal can be considered truly intercontinental (only the DF-5/5A). Estimates place the total ballistic missile inventory of China at just over 100, and estimated quantities of the DF-5/5A range from 7 to 13 missiles. All remaining missiles have ranges of 4700 km or less, allowing

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[133] Nathan and Ross, 203.

[134] Paul Monk, "China's Power Trip", *Far Eastern Economic Review*, 21 March 1996, 28.

[135] Nathan and Ross, 205.

a land-based limited reach to Alaska and extreme northern Canada, or to Central Europe. Including the possibility of using forward-deployed submarines and SLBMs, only around 15 percent of China's missile forces have the capacity to reach the United States.

China's ballistic missiles are of uneven quality and great variance in age. It takes China a long time to research, develop, and field a new missile system. Apparently the shortest known developmental time frame successfully implemented is still around a decade.[136] Facing future large demands on the limited resources, modernizing conventional forces is a higher Chinese priority than the nuclear weapons program.[137] Yet China attaches increasing importance to ballistic missiles for both nuclear and conventional purposes.

a. Land-Based

Currently, seven land-based ballistic missile variants are in use (Table 1), one of which, the M-7, is not nuclear-capable. A second, the DF-15, is suspected but unconfirmed to have a dual-use capability. Two others, the DF-31 and DF-41, are in development with the former nearing deployment as a nuclear-only ICBM (China's first since the DF-5) and the latter not expected to deploy until well after 2000 as a replacement for the DF-5.[138] Land-based ballistic missile systems, both nuclear and non-nuclear, are the backbone of Chinese power projection capabilities. Ballistic missiles, in the nuclear and conventional roles, are China's strongest power projection capability, a Chinese security characteristic that is not going to change in the foreseeable future. Its modernization drive involves three dimensions for its land-based forces.

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[136] With the DF-15/M-9 (CSS-6) missile.

[137] Norris et al., 15.

[138] "Asia Pacific: In Brief," *Jane's Defense Weekly*, 23 September, 1998, 14.

Table 1

CHINESE LAND-BASED BALLISTIC MISSILES

Chinese Designation	US Designation	Range (km)	Missile Classification*	Warhead†	Estimated Quantity
DF-3/3A	CSS-2	2800	IRBM	N, C	50
DF-4	CSS-3	4750	IRBM	N	20
DF-5/5A	CSS-4	13000	ICBM	N	7-13
DF-11/M-11	CSS-7	300	SRBM	N, C	‡
DF-15/M-9	CSS-6	600	SRBM	N?, C	‡
DF-21/21A	CSS-5	1800	MRBM	N, C	36
DF-31	None	8000	ICBM	N	under development
DF-41	None	12000	ICBM	N	under development
M-7	CSS-8	160	SRBM	C	‡

Sources: SIPRI Yearbooks 1994-97; Norris et. al., 358-388; *1998 Strategic Assessment*.
*Missile classifications are in accordance with US Department of Defense judgements.
†Warhead classifications are (N)uclear and (C)onventional.
‡ Actual numbers uncertain.

First, improved missile accuracy using various methods, including the Global Positioning System (GPS) and GLONASS, will enable better counterforce and countervalue targeting. Such capabilities are suspected in the DF-15 missile, and are also judged to be planned for the DF-31 and DF-41. An upgrade to the DF-11 missile supposedly permitted a doubling of its range after adding such accuracy improvements.

With the development of the DF-21 and its sea-based counterpart, the JL-1, China moved from the realm of liquid-fueled ballistic missiles into solid-fueled. Since then, the DF-15 and DF-11 have followed suit as are the forthcoming DF-31 and DF-41. Yet solid propellent missiles are a small fraction of China's ballistic missile inventory. Its still

predominantly liquid-fueled force is limited in both reaction time, since it takes hours to get ready for launch (especially the DF-5 ICBM), and in location, because the fueling equipment ties the force to a particular location.

Mobility undergirds China's land-based missile modernization effort. Transporter-erector-launchers (TELs) have become the platform of choice for China's land-based ballistic missiles. TELs provide a cheap means for providing China an assured second-strike capability by making it highly unlikely that all missile forces could be found and eliminated in a preemptive attack by another state. China can also exploit the mobility of such missile systems to frustrate adversary intelligence efforts and raise the level of uncertainty in the adversary.

b. Sea-Based

Currently, the PRC only has one SLBM, the JL-1, in service, with a second, the JL-2 (the sea-launched version of the DF-31), in development (Table 2). Although the JL-1 SLBM arrived in 1982, its effective deployment as a sea-based deterrent did not happen for six more years. The commissioning of the 09-2 SSBN occurred in 1988. This SSBN carries 12

Table 2

CHINESE SEA-BASED BALLISTIC MISSILES

Chinese Designation	US Designation	Range (km)	Estimated Quantity	Warhead†
JL-1	CSS-N-3	1700	24	N
JL-2	CSS-NX-4	8000	under development	N

Source: *SIPRI Yearbooks*
†Warhead classifications are (N)uclear and (C)onventional.

missiles.[139] Although two of these 09-2 submarines were built, only one is confirmed to be operational. The 09-4, China's second-generation missile sub, is expected to be completed by about the year 2000, and it will be equipped with JL-2 (the sea-launched version of the DF-31) missiles with an 8,000 km range.[140]

c. Exports

In the past, China has exported ballistic missiles and ballistic missile technologies. During the late 1980s, China sold DF-3/3A missiles (without warheads) to Saudi Arabia.[141] China transferred DF-11/M-11 missile components to Pakistan in the early 1990s, and is suspected of technologically aiding Pakistan's indigenous missile production capability. China's special relationship with Iran regarding missile technology has recently faltered, however, over concerns about Iran's ability to pay for Chinese assistance and world condemnation of China's role. It is believed that the DF-15/M-9 (CSS-6) is being marketed for export, but as of yet, no known sales have occurred. This concern about possible M-9 sales persists despite China's 1992 commitment to abide by the MTCR.

B. THE UNITED STATES, CHINA, AND THE BMD DEBATE

The concept of anti-ballistic missile systems emerged alongside the development of the more familiar offensive missile systems during the first half of the Cold War. Until the early 1970s, it appeared that US missile defenses would progress alongside their offensive counterparts. The United States has a number of anti-ballistic missile programs in its history

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[139] John Wilson Lewis and Xue Litai, *China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age* (Stanford, CA: Stanford University Press, 1994), 224.

[140] Lewis and Xue, *China's Strategic Seapower*, 224.

[141] Sutter, "Chinese Nuclear Weapons and Arms Control Policies," 18-19.

to show for this: Nike-Zeus, Nike-X, Sprint, Sentinel, Safeguard, and later the Strategic Defense Initiative (SDI).[142] In 1972 the Anti-Ballistic Missile (ABM) Treaty between the United States and the Soviet Union confirmed bilateral vulnerability to nuclear attack and curbed US research and development efforts toward active defenses. The ABM Treaty has since limited the defensive side of the strategic equation, despite the fact that the Strategic Defense Initiative (SDI) resurrected ideas of large-scale missile defenses in the 1980s.

In this section, the issues surrounding post-Cold War US BMD are briefly examined, followed by an assessment of the effects on Chinese national security and potential Chinese responses. Such an exploration of BMD is not intended to predict the future course of Chinese national security decision-making, but instead to filter the myriad of options the Chinese have and to determine, based on the preceding evaluation of their national security concerns, which are *more likely* to be acted on.

1. US BMD Issues

a. Moral Responsibility

The proponents of acquiring ballistic missile defenses empnasize the nation's moral obligation to provide for the safety and protection of its citizens and forward-deployed soldiers. Opponents of BMD contend that the moral responsibility rather is to cure the disease (defined as the existence of nuclear weapons) rather than to treat the symptom (citizen and soldier vulnerability). The record of the past fifty years shows that the elimination of nuclear weapons is an extremely complicated proposition. In some circumstances, even to

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[142] Joseph M. Keenan, *Overcoming the ABM Treaty: Paths to National Missile Defense*, Master's Thesis, Naval Postgraduate School, Monterey, California, June 1998, 1.

limit the spread of nuclear weapons may be impossible. BMD proponents argue therefore that the United States ought to do what is within its reach to mitigate the risks posed by the unavoidable presence of nuclear weapons in the world. Moreover, BMD proponents point out that ballistic missiles may also have chemical, biological, or conventional warheads.

b. Theater Threat

Aside from the philosophical question surrounding the defense of forward-deployed US troops, the operational and political ramifications are subject to debate. Coercion by a missile-armed adversary can be either direct (directed at the United States or its forces) or indirect (situations in which a weaker power that lacks the capability to deter a stronger power directly might choose to threaten another weaker power, one usually but perhaps not always allied to the United States). This threat could also be applied against a state with no real political connection to the ongoing conflict.[143] The world saw this in the Persian Gulf in 1991. Iraq threatened and then attacked Israel and Saudi Arabia in an effort to ward off intervention by the US-led coalition.

Ballistic missiles are short-time delivery vehicles that may be used by powers unable to compete with the United States by acquiring more expensive, longer-fused air forces. The Iraqi experience in 1991 demonstrated that a regional power's air forces probably will not come close to matching up against the airpower of the United States and that conventional air forces are not an effective avenue for engaging the United States militarily. The Iraqi success in inflicting damage and killing and injuring US personnel with relatively cheap Scud missiles demonstrated a more promising alternative than competing with the United States in

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[143] Harkavy, 64.

conventional air power — that is, ballistic missiles. US BMD offers the opportunity to significantly reduce or even eliminate the attractiveness of this asymmetric alternative.

c. Hedge Against Rogue and Failing Nuclear or Nuclear-Capable States

The collapse of the Soviet Union precipitated a situation where instability and uncertainty surrounded a state and its military possessing ballistic missiles and nuclear weapons. Russia, Ukraine, Belarus, and Kazakhstan were the immediate inheritors of the Soviet nuclear arsenal. Concerns about stability, economics, and command and control raised awareness of the threat of accidental launch or the diffusion of ballistic missiles, nuclear weapons, nuclear materials, and nuclear expertise. Although Ukraine, Belarus, and Kazakstan eventually resolved concerns by giving up control of those weapons to Russia, other states could also pose regime failure problems, notably North Korea and Pakistan. Rogue states — such as Libya, Iran, North Korea, Syria and Iraq — pose increasing regional threats to US forces reacting to conflict as well as to US regional allies and neutral states.[144] And rogue actors need not be states. The terrorist missile threat could also, at least in some instances, be countered by BMD.

d. Cost

High on the list of objections to BMD is its cost. In fiscal year 1997, US $3.6 billion funded the BMDO, which manages all of the United States BMD research and development efforts. Tens of billions of dollars have been invested in BMD programs since the mid-1980s, with little fielded capability to show for it. Perhaps the Patriot PAC-3 is the most significant result, and that has limited application. BMD opponents argue that both domestic needs and

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[144] Rogue states as reported by *1998 Strategic Assessment* , 7.

other US security needs should be regarded as higher priorities than BMD. It is unknown how much investment it will take to develop the desired capabilities, assuming that all are even possible.

Can we hit a bullet with a bullet? Questions about the feasibility of such aspirations and the increasingly disadvantageous cost-exchange ratio have been raised as research and development costs have mounted. At least one multimillion dollar interceptor would be used to destroy a several hundred thousand dollar missile. Would the operational costs of such systems be prohibitive, such that the United States would use a platinum bullet to counter a brass one? Such asymmetrical ratios make saturation counter-strategies to BMD appealing for US adversaries in possession of such missiles. Conversely, such ratios have encouraged the United States to examine other methods of defeating missiles, such as directed-energy interception means or better space-based reconnaissance to be able to destroy the missiles at their launch sites.

e. The Time Factor

Rendering ballistic missile delivery systems ineffective could enable the United States to defuse a crisis situation. With US BMD present, an adversary's offensive action would require more time-consuming military operations such as conventional air power sortieing from bases or maneuvering ground forces. This would increase detection times and also allow the United States more time for diplomatic or military reaction. Escalation control would be better maintained since fewer decisions would have to be made on quick reactions to limited information.

f. Arms Control

Most of the arguments against BMD concern the damage such capabilities would allegedly cause to the arms control and disarmament efforts of the past thirty years. The NPT, the ABM Treaty, and the START treaties would suffer, it is argued. Such arguments assume that continued arms control efforts can limit or even reverse the security consequences of nuclear weapons and ballistic missiles.

While BMD does not directly undermine the NPT, it does raise questions about the US commitment to the NPT's Article VI (nuclear disarmament). Critics of BMD and nuclear weapons argue that the development and possession of BMD would perpetuate the presence of nuclear weapons in the international security environment, because offense-defense arms competitions would be encouraged. Some countries might, it is argued, reevaluate commitments to a treaty (the NPT) which has codified their lack of a security tool (nuclear weapons). Left unanswered by this argument, though, are the efforts of non-nuclear-weapon states, such as Taiwan and Japan, to develop BMD capabilities BMD does not pose a dilemma for all states party to the NPT, but primarily for the five NPT-recognized nuclear powers, to the extent that they are committed to fulfilling their Article VI commitment to nuclear disarmament.[145]

The most problematic arms control conflict BMD creates concerns ABM Treaty compliance. The ABM Treaty is the foundation of bilateral Washington-Moscow nuclear arms

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[145] The United States, Russia, Britain, France, and China.

limitation treaties.[146] The arguments over the ABM Treaty aspect of BMD have resulted in a binary choice for the United States: either the ABM Treaty is maintained, in which case a number of US BMD programs enter into question, or the United States withdraws from the treaty. Amending the ABM Treaty is highly improbable, in view of failed efforts earlier in the post-Cold War period. "Muddle-through" avoidance of the ABM Treaty question may result in its *de facto* voiding.[147]

The START treaties could be damaged by BMD through vertical proliferation countermeasures. More ballistic missiles, MIRVed missiles, cruise missiles, and clandestine means (smuggling) all provide means to saturate or circumvent BMD and raise the probability of nuclear weapons employment by unauthorized use (the failed or failing state fear), and accidental detonation or accidental launch, misperception or miscalculation in a crisis, or the failure to adequately deter. In any of these cases, the magnitude of disaster could be amplified by vertical BMD countermeasures.

g. Continuing Proliferation

Despite all of the best efforts of the arms control community, nuclear weapons, chemical weapons, and biological weapons are proliferating. So are ballistic missile delivery systems. The Rumsfeld Commission reports that "the threat to the [United States] posed by these emerging capabilities is broader, more mature and evolving more rapidly than has been

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[146] In 1995, President Clinton and Russian President Boris Yeltsin "issued a joint statement asserting that the [ABM Treaty] was 'the cornerstone of strategic stability.'," Fred Charles Iklé, "The Second Coming of the Nuclear Age," *Foreign Affairs* 75, No. 1 (January-February 1996), 125.

[147] See Keenan, 67-79.

reported in estimates and reports by the Intelligence community."[148] Fueled by the US-led coalition's demolition of Iraqi conventional air forces in 1991, states are recognizing that questionable investments in expensive air forces which are likely to fall victim to superior US air forces early in a conflict are unwise, and that less expensive ballistic missile systems are better investments. Mobile ballistic missile systems proved themselves difficult to attack in 1991, demonstrating a better prospect to inflict damage on the United States. With the emerging systems of improved accuracy, no longer are ballistic missiles limited to carrying weapons of mass destruction to inflict substantial damage. This suggests an increasing likelihood that the United States will encounter ballistic missiles in conflicts. Although others argue that there are less expensive measures with which to deal with the proliferation problem, including arms control non-proliferation measures and economic incentives, BMD supporters insist that the inability to stop proliferation demonstrates the weaknesses of these alternatives.

2. China's Capabilities, Reactions, and Regional Reality

Despite China's irredentist claims to territories it considers its own (territories it considers lost because of the machinations of other powers during its century of humiliation), China is not a rogue state. To restore China's past stature Beijing is engaging in actions legal by international standards. If anything, China shows a deft ability to press the limits of international acceptability. For each reason pessimists about China's behavior tout in support of US-led containment efforts, a reason to engage China can also be touted by optimists.[149]

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[148] Commission to Assess the Ballistic Missile Threat to the United States. *Executive summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States*, Donald H. Rumsfeld, Chairman. 104th Congress. 15 July, 1998.

[149] Ronald N. Montaperto, *Reality Check: Assessing the Chinese Military Threat*, Progressive Policy Institute Defense Working Paper No. 4, Steven J. Nider, ed., April 1998, 5. Accessible from the

BMD, especially TMD, plays well to the Chinese containment crowd. While NMD has the potential to take away China's extraregional nuclear deterrent, TMD portends a devastating diminution of Chinese missile effectiveness in the Asia-Pacific region, and ultimately a diminution of Chinese regional coercive capacity.

The United States is *China's* short-term security concern. China sees the potential of BMD to allow the United States to freely operate globally as yet another way to allow the United States to exercise its self-appointed role as the leading international policeman. The ability of the United States to unilaterally frustrate Chinese national interests is the specific problem, and Chinese short-term modernization efforts are directed toward overcoming this threat. Taiwan, however, is *the Chinese Communist Party's* short-term security concern because of the legitimacy stake the party placed on the issue. In the face of China's growing internal economic challenges and Taiwan's democratization and vibrant economy, the CCP cannot "lose" Taiwan to independence. Japan is China's long-term security concern. Since the late 1800s, Japan has been China's security frustration. The memories of World War II remain. Although the United States is a short-term problem, China recognizes that the US-Japan security alliance is containing China's greatest fear — a militarily resurgent and unilaterally acting Japan in the region. Japan is China's regional competitor.

Regional issues promising clashes of interests between the United States and China are the future of the Korean peninsula and Taiwan. Anticipating the failure of North Korea, China has taken to strengthening its ties to the South during the 1990s. With the collapse of the Soviet Union, North Korea is effectively alone. Since there is uncertainty as to how far the

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Internet at http://www.dlcppi.org/library.html-ssi.

North's nuclear program has progressed, the method of the North's demise (whether it implodes, explodes, or uneventfully reunifies) is paramount. Questions of whose orbit a united peninsula will ultimately choose have considerable implications for the China — Japan — Korea — United States quadrangle. China desires to draw a unified Korean peninsula into its orbit of influence out of concern regarding the Northeast Asian future power balance.

Complicating both Chinese and US security concerns in Northeast Asia in the longer-term is Russia, which is far from stable. Russia's considerable nuclear and missile resources remain in China's security calculus despite a warming cooperation in the post-Cold War. Given the situation in relations between Pakistan and India, the tenuous stability of the regional *status quo* is appealing for China — at least in comparison to open warfare. While legitimacy is the CCP's challenge, stability is the linchpin for that legitimacy; and the ingredients of legitimacy include territorial integrity and economic growth.

US BMD, Japanese assistance to BMD research and development, and an independent BMD effort within the context of a democratizing and economically vibrant Taiwan raise serious concerns for PRC national interests.[150] In the short term, the problem is largely one of a political nature since China's existing military capabilities can overwhelm limited BMD efforts of questionable reliability. In the longer term, assuming that near-term limited BMD capabilities would evolve and become capable of intercepting a greater volume and variety of missiles, with a reduction in the BMD cost-exchange ratio, China's security posture would experience a fundamental need to adapt.

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[150] "Leaders from Taiwan's ruling Kuomingtan party tend to downplay Taipei's interest in TMD while opposition lawmakers often are bellicose in their support for accelerated development and eventual deployment of antimissile capabilities." Opall-Rome, 34.

The concept of a revolution in military affairs (RMA) involves three dimensions: technological innovation, operational integration, and organizational adaptation. Technology or technological innovation alone does not provide an effective force. That technology must be integrated into the fighting force structure such that the capabilities are brought to bear in the most efficient way possible. The military must also be able to adapt the necessary organizational structure to bring those capabilities to bear rapidly and effectively.

The PRC modernization efforts are asymmetric to those of the United States. The PLA is the single military service, with the navy (PLAN) and the air force (PLAAF) as subject parts. The PLA is responsible for the modernization process without substantial interference on the part of component services. In contrast, in the United States the Army, Navy, Air Force, and Marines each have substantial influence on the acquisition processes, to say nothing of the politics involved in Congressional-Executive interactions in the US government. As a result, China may be in a much better position to enact top-down modernization programs incorporating unique combat concepts. Service parochialism may be a marginal, if not irrelevant, modernization restraint.

China's current modernization efforts that encompass its missile systems are a way to curb US unilateral action and remain able to coerce Taiwan should independence ideas progress. Accuracy improvements could allow airburst conventional munitions to reliably carpet Taiwanese airfields, prompting Taiwan to move to protect its aircraft at the cost of not being able to make quick use of them.

> The M-9 gives China the ability to exert military and political pressure within the region.... Chinese military writings cast these missiles in the same light in which the United States casts its own high-technology missiles in the Gulf War. That is, the Chinese military would use their rocket forces in a first-strike against Taiwan airfields,

> air defenses, and command and control sites in an effort to degrade Taiwanese air and air defense capabilities.[151]

As far as nuclear arms control is concerned, China emphasizes the principle that the US and Russian arsenals should be reduced to levels comparable with China's forces before Beijing will engage in any arms limitations or reductions negotiations. More so than the large arsenal of the Russians, US BMD would undermine the medium nuclear states' deterrents — particularly that of China.

China is not a party to the ABM Treaty, nor has China made any commitment to abide by its provisions as it has with the MTCR. Although public statements in support of the ABM Treaty have been made, China shows no inclination to become a party to the treaty. Beijing is on record, however, in opposing any effort to renegotiate the ABM treaty. The fear is that advanced theater missile defenses would seriously undermine China's deterrent, and invalidate much of China's existing nuclear delivery capability. According to Garrett and Glaser,

> In an unpublished April 1995 paper assessing the implications of amending the ABM Treaty, an arms control expert from a scientific research institute involved in China's nuclear weapons program calculated that 80 percent of Chinese land-based "strategic missiles" would fall into the category of "theater" missiles and would be vulnerable to US and Russian TMD systems aiming at countering missiles with ranges up to 3,000 km. The analyst further contended that a TMD system capable of destroying warheads entering the atmosphere at 5 km/sec would have significant capabilities against China's longer-range strategic missiles.[152]

Furthermore, Robert Sutter notes that:

> China's few dozen nuclear-capable bombers are too slow and technically backward to penetrate modern air defenses. Beijing relies for nuclear weapons delivery mainly

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[151] Michael Nacht and Tom Woodrow, "Nuclear Issues," in *Strategic Trends in China*, Hans Binnendijk and Ronald N. Montaperto, eds. (Washington, D.C.: National Defense University Press, 1998), 89.

[152] Garrett and Glaser, 73.

> on its mobile ground-based and nascent sea-based missiles....All of China's current mobile missiles, land- or sea- based, would be blocked by the TMD system proposed by US advocates.[153]

In the post-Cold War period, China has slowly realized the need to curb nuclear proliferation for its own security. This concern stems from its need for regional stability in the face of a number of weak or failing neighboring states. Despite its accession to the NPT, China apparently doubts whether the nonproliferation regime can do more than slow the spread of WMD. Furthermore, China does not equate nuclear proliferation with ballistic missile proliferation. Complicating the issue of proliferation is China's distinction between nuclear weapons and nuclear power. The Chinese emphasize the right of developing states to acquire nuclear power to satisfy their energy needs. China is willing to assist developing countries in developing nuclear power capabilities.

What, then, are the consequences of US BMD on Chinese national security? First and foremost, China is not in a position economically or militarily to raise much more than political objections. Asymmetric countermeasures are their probable military response. Area denial strategies directed at forestalling US regional interference regardless of the existence of US BMD capabilities are even now underway.

Lewis and Xue note that an offshore defense strategy is replacing the past coastal defense strategy, meaning that the Chinese are pushing their defense perimeter out to between 200-nm and 400-nm.[154] Ballistic and cruise missiles are essential components, along with an increasing realization of the submarine potential. The submarine component is much less a

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[153] Robert G. Sutter, *Theater Missile Defense: Possible Chinese Reactions; US Implications and Options*, Congressional Research Service Report 94-154S, (23 February, 1994), 2.

[154] Lewis and Xue, *China's Strategic Seapower*, 228, 230.

current factor in China's capabilities, and it is uncertain how fast such a capability might grow. In 1991, the Central Military Commission ordered the navy to continue constructing submarines and gave "the development of submarines...precedence over all other [construction]."[155] Submarine construction efforts are moving slowly. Efforts to purchase diesel submarines from Russia have faltered. Originally ten Kilo submarines were to be purchased. Two have been received, but acquiring the remaining eight is in question. In any conflict involving Taiwan, the front line of defense would nonetheless be submarines, because China intends to inject uncertainty into the United States intervention calculus as part of an emerging area denial strategy.[156] That is, the submarines would keep US surface ships at a distance to facilitate the conduct of China's missile attacks.

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[155] Guo Xiangxing, "An Interview with Vice-Admiral Zhang Lianzhong, Commander of the Chinese Navy," *Xiandai Junshi*, No. 7, 1991; cited in Lewis and Xue, *China's Strategic Seapower*, 228.

[156] Lewis and Xue, *China's Strategic Seapower*, 228.

V. CONCLUSION

> The highest realization of warfare is to attack the enemy's plans; next is to attack their alliances; next to attack their army; and the lowest is to attack their fortified cities.
>
> Sun Tzu, *The Art of War*

China is already addressing future US BMD capabilities while shaping its national security strategies for the next century. Beijing aims to curb US influence through area denial strategies. Beijing plans to combine missiles and blue water naval power forces to inject uncertainty into US intervention calculations. US ballistic missile defenses would challenge China's area denial strategy by potentially negating China's short and medium range ballistic missiles. The implications of US BMD for China's nuclear deterrent are secondary to those US BMD would have for Chinese conventional power projection abilities.

Because of this area denial consequence, US BMD programs constitute an important factor in Chinese national security strategy and planning. Relatively simple technical countermeasures could hypothetically be implemented to thwart US BMD, albeit at a resource expense that China would prefer to avoid, owing to its other priorities. Depending in part on the level of US investment and potential technological achievements, US BMD ultimately may be of limited consequence to China's military capabilities, and in the longer term, may prove to be insufficient to negate China's ballistic missile threat, wherever that threat might be directed. It will take time for US BMD research and development efforts to field systems that can effectively counter China's *existing* missiles. But when US ballistic missile defenses are fielded years from now, a myriad of countermeasures will have been developed by the Chinese and may undermine that BMD capability. China can immediately pursue the simplest

countermeasure to BMD — vertical escalation (that is, multiplying numbers of missiles and warheads) — to overwhelm and therefore penetrate any ballistic missile defense systems based on kinetic-kill interceptor missiles. Future measures, such as MIRVs, maneuverable reentry vehicles (MARVs), depressed missile trajectories (to defeat upper-tier systems), and cruise missiles would increase the challenges facing US missile defense programs. Area denial strategies using submarine threats to keep US naval BMD assets at a distance and thereby preclude BMD engagement also could pose problems for the United States.

Cost-exchange ratios will be of decisive importance. If it costs a ballistic missile defense system several millions of dollars to intercept ballistic missiles costing several hundred thousand to two million dollars, the United States will find itself on the wrong side of the expense equation, especially if the Chinese pursue saturation tactics.

If it was obviously easy to defeat US missile defenses, however, the Chinese would not be concerned about them. The Chinese may well be concerned about increased costs, about the political implications of being obliged to undertake larger missile attacks, and about the possibility that the United States may develop missile defenses based on directed energy systems and enhanced space-based reconnaissance and early warning that would shift the cost-exchange ratio decisively against China.

It is not apparent that China wants conflict with the United States. It is in US interests to reassure Chinese leaders, both politically and militarily, particularly on the bilateral level. The Chinese are seeking the ability to counter what they consider unchecked US regional power. At least for the time being, however, the Chinese do not want the United States to remove its political-military presence from the region. A reduced US political-military

presence would invite Japan to build up its military, a greater long-term concern for Chinese national interests than US influence in the region. China's interest in maintaining constructive economic and political relations with the United States offers the United States an opportunity to pursue its decisions about missile defenses in East Asia in a cautious and deliberate manner, with due attention to the risk of provoking unintended and undesirable consequences.

BIBLIOGRAPHY

Books and Monographs

Allen, Kenneth W. "PLAAF Modernization: An Assessment," in *Crisis in the Taiwan Strait*, edited by James R. Lilley and Chuck Downs (Washington, D.C.: National Defense University Press, 1997), 217-248

Binnendijk, Hans and Ronald N. Montaperto, editors. *Strategic Trends in China* (Washington, D.C.: National Defense University Press, 1998)

Bitzinger, Richard A. "Military Spending and Foreign Military Acquisitions by the PRC and Taiwan," in *Crisis in the Taiwan Strait*, edited by James R. Lilley and Chuck Downs (Washington, D.C.: National Defense University Press, 1997), 73-104

Carr, Edward Hallett. *The Twenty Years' Crisis, 1919-1939* (Reprint, New York: Harper & Row, 1964)

Tai Ming Cheung. "Chinese Military Preparations Against Taiwan Over the Next 10 Years," in *Crisis in the Taiwan Strait*, edited by James R. Lilley and Chuck Downs (Washington, D.C.: National Defense University Press, 1997), 45-72

Cossa, Ralph A. "The PRC's National Security Objectives in the Post-Cold War Era and the Role of the PLA," in *Contemporary China in the Post-Cold War Era*, edited by Bih-jaw Lin and James T. Myers, (Columbia, SC: University of South Carolina Press, 1996), 199-224

_____. "Nuclear Forces in the Far East: Status and Implications for Proliferation," in *Peace and Security in Northeast Asia: The Nuclear Issue and the Korean Peninsula* edited by Young Whan Kihl and Peter Hayes (Armonk, NY: M.E. Sharpe, 1997), 359-380

Drell, Sidney D. "Reducing Nuclear Danger: Reflections on the Roles of France, China, and Britain, and on a Test Ban," in *Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China*, edited by John C. Hopkins and Weixing Hu, (New Brunswick, NJ: Transaction Publishers, 1995), 239-268

Dreyer, June Teufel. "A History of Cross-Strait Interchange," in *Crisis in the Taiwan Strait*, edited by James R. Lilley and Chuck Downs (Washington, D.C.: National Defense University Press, 1997), 13-44

Drohan, Thomas A. "East Asia and the Pacific: The Security of a Region," in *The Defense Policies of Nations: A Comparative Study*, Third Edition, edited by Douglass J. Murray and Paul R. Viotti (Baltimore, MD: Johns Hopkins University Press, 1994), 331-350

Fisher, Richard D. jr. "China's Missiles Over the Taiwan Strait: A Political and Military Assessment," in *Crisis in the Taiwan Strait*, edited by James R. Lilley and Chuck Downs (Washington, D.C.: National Defense University Press, 1997), 167-216

Garthoff, Raymond L. *Policy Versus the Law: The Reinterpretation of the ABM Treaty* (Washington, D.C.: The Brookings Institution, 1987)

George, Alexander L. and Richard Smoke. *Deterrence in American Foreign Policy: Theory and Practice* (New York: Columbia University Press, 1974)

Gill, Bates. "Chinese Military Hardware and Technology Acquisitions of Concern to Taiwan," in *Crisis in the Taiwan Strait*, edited by James R. Lilley and Chuck Downs (Washington, D.C.: National Defense University Press, 1997), 105-130

Hopkins, John C. and Weixing Hu. "Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China," in *Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China*, edited by John C. Hopkins and Weixing Hu, (New Brunswick, NJ: Transaction Publishers, 1995), 3-15

Institute for National Strategic Studies. *1998 Strategic Assessment: Engaging Power for Peace* (Washington, D.C.: National Defense University Press, 1998)

Jencks, Harlan W. "The PRC's Military and Security Policy in the Post-Cold War Era," in *Contemporary China in the Post-Cold War Era*, edited by Bih-jaw Lin and James T. Myers, (Columbia, SC: University of South Carolina Press, 1996), 225-259

_____. "Wild Speculations on the Military Balance in the Taiwan Strait," in *Crisis in the Taiwan Strait*, edited by James R. Lilley and Chuck Downs (Washington, D.C.: National Defense University Press, 1997), 131-166

Joffe, Ellis. "The PLA and the Economy: The Effects of Involvement," in *Chinese Economic Reform: The Impact on Security*, edited by Gerald Segal and Richard H. Yang, (New York: Routledge, 1996), 11-34

Johnston, Alastair Iain. *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History* (Princeton, NJ: Princeton University Press, 1995) DS753.J64 1995

_____. "Cultural Realism and Strategy in Maoist China," in *The Culture of National Security: Norms and Identity in World Politics*, edited by Peter J. Katzenstein, (New York: Columbia, 1996), 216-268
UA10.5.C85 1996 Checked out

Keohane, Robert O. and Joseph S. Nye, *Power and Interdependence: World Politics in Transition* (New York: Little, Brown, 1977)

Kim, Samuel S. "Mainland China in a Changing Asia-Pacific Regional Order," in *Contemporary China in the Post-Cold War Era*, edited by Bih-jaw Lin and James T. Myers (Columbia, SC: University of South Carolina Press, 1996), 263-305

Lewis, John Wilson and Xue Litai. *China Builds the Bomb*, with foreword by Sidney D. Drell (Stanford, CA: Stanford University Press, 1988)

_____. *China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age* (Stanford, CA: Stanford University Press, 1994)

Lin, Herbert. *New Weapon Technologies & the ABM Treaty* (Elmsford, NY: Pergamon Press, 1988)

Xue Litai. "Evolution of China's Nuclear Strategy," in *Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China*, edited by John C. Hopkins and Weixing Hu, (New Brunswick, NJ: Transaction Publishers, 1995), 167-189

Chong-Pin Lin. *China's Nuclear Weapons Strategy: Tradition Within Evolution* (Lexington, MA: Lexington Books, 1988)

Maybaumwisniewski, Susan C. and Mary A. Sommerville, editors. *Blue Horizon: United States — Japan — PRC Tripartite Relations* (Washington D.C.: National Defense University Press, 1997)

McVadon, Eric. "PRC Exercises, Doctrine, and Tactics Toward Taiwan: The Naval Dimension," in *Crisis in the Taiwan Strait*, edited by James R. Lilley and Chuck Downs (Washington, D.C.: National Defense University Press, 1997), 249-278

Nathan, Andrew J. and Robert S. Ross. *The Great Wall and the Empty Fortress* (New York: W. W. Norton & Company, 1997)

Norris, Robert S., Andrew S. Burrows, and Richard W. Fieldhouse. *Nuclear Weapons Databook, Volume V: British, French, and Chinese Nuclear Weapons* (Boulder, CO: Westview Press, 1994)

Nye, Joseph S. Jr. *Nuclear Ethics* (New York: The Free Press, 1986)

Payne, Keith B. *Post-Cold War Requirements for U. S. Nuclear Deterrence Policy* (Fairfax, VA: National Institute for Public Policy, March 1998)

Pillsbury, Michael, ed. *Chinese Views of Future Warfare*, Revised Edition (Washington, D.C.: National Defense University Press, 1998)

Pollack, Jonathan D. "The Future of China's Nuclear Weapons Policy," in *Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China*, edited by John C. Hopkins and Weixing Hu, (New Brunswick, NJ: Transaction Publishers, 1995), 157-166

Quester, George H. "British, French, and Chinese Nuclear Forces: Old Issues and New," in *Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China*, edited by John C. Hopkins and Weixing Hu, (New Brunswick, NJ: Transaction Publishers, 1995), 269-272

Segal, Gerald. "Nuclear Forces in Northeast Asia," in *Peace and Security in Northeast Asia: The Nuclear Issue and the Korean Peninsula* edited by Young Whan Kihl and Peter Hays (Armonk, NY: M.E. Sharpe, 1997)

Segal, Gerald and Richard H. Yang. "Introduction" in *Chinese Economic Reform: The Impact on Security*, edited by Gerald Segal and Richard H. Yang (New York: Routledge, 1996), 1-8.

Stockholm International Peace Research Institute. *SIPRI Yearbook 1991: World Armaments and Disarmament* (New York: Oxford University Press, 1991)

_____. *SIPRI Yearbook 1992: World Armaments and Disarmament* (New York: Oxford University Press, 1992)

_____. *SIPRI Yearbook 1993: World Armaments and Disarmament* (New York: Oxford University Press, 1993)

_____. *SIPRI Yearbook 1994: World Armaments and Disarmament* (New York: Oxford University Press, 1994)

_____. *SIPRI Yearbook 1995: World Armaments and Disarmament* (New York: Oxford University Press, 1995)

_____. *SIPRI Yearbook 1996: World Armaments and Disarmament* (New York: Oxford University Press, 1996)

_____. *SIPRI Yearbook 1997: World Armaments and Disarmament* (New York: Oxford University Press, 1997)

Sun Tzu and Sun Pin, *The Complete Art of War*, translated by Ralph D. Sawyer (Boulder, CO: Westview Press, 1996)

Swaine, Michael D. *The Role of the Chinese Military in National Security Policymaking*, Revised Edition (Santa Monica, CA: RAND, 1998)

Journals and Periodicals

Barkin, J. Samuel and Bruce Cronin. "The State and the Nation: Changing Norms and the Rules of Sovereignty in International Relations," *International Organization* 48, No. 1 (Winter 1994), 107-130

Baum, Julian. "Tough Mandate," *Far Eastern Economic Review*, 4 April 1996, 14-16

Baum, Julian and Matt Forney. "Strait of Uncertainty," *Far Eastern Economic Review*, (8 February, 1996), 20-21

Boyne, Sean. "Taiwan's Troubles: National Defense Report Highlights Chinese Threat," *Jane's Intelligence Review*, September 1998, 25-28

Chang, Maria Hsia. "Chinese Irredentist Nationalism: The Magician's Last Trick," *Comparative Strategy*, (January-March 1998), 83-100

Cohen, Eliot A. "A Revolution in Military Affairs," *Foreign Affairs* 75, No. 2, March-April 1996, 37-54

Deng, Yong. "The Chinese Conception of National Interests in International Relations," *The China Quarterly*, June 1998, 308-329

Desch, Michael C. "Culture Clash: Assessing the Importance of Ideas in Security Studies," *International Security* 23, No. 1 (Summer 1998), 141-170.

FAX #

Ebata, Kensuke. "Japan Joins USA in Theater Missile Defense Research," *Jane's Defense Weekly* (September 30, 1998), 3

Garrett, Banning N. and Bonnie S. Glaser. "Chinese Perspectives on Nuclear Arms Control," *International Security* 20, No. 3 (Winter 1995/96), 43-78

Garrity, Patrick J. "Nuclear Weapons and Asia-Pacific Security: Issues, Trends, and Uncertainties," *National Security Studies Quarterly* 4, Winter 1998, 41-79

Harkavy, Robert E. "Triangular or Indirect Deterrence/Compellence: Something New in Deterrence Theory?" *Comparative Strategy*, January-March 1998, 63-81

Holloway, Nigel. "Playing with Fire," *Far Eastern Economic Review*, 14 March 1996, 21

_____. "Strait Talking," *Far Eastern Economic Review*, 21 March 1996, 16

Hsiung, James C. "China's Omni-Directional Diplomacy: Realignment to Cope with Monopolar US Power," *Asian Survey* 35, No. 6 (June 1995), 573-586

Hung-yi Jan. "The PRC's Policies Toward Nonproliferation Regimes," *Issues & Studies* 33, No. 11 (November 1997), 112-132

Iklé, Fred Charles. "The Second Coming of the Nuclear Age," *Foreign Affairs* 75, No. 1, January-February 1996, 119-128

Jane's Defense Weekly (23 September, 1998), "Asia Pacific: in Brief," 14

Johnston, Alastair Iain. "Thinking About Strategic Culture," *International Security* 19, No. 4 (Spring 1995), 32-64

_____. "China's New 'Old Thinking,': The Concept of Limited Deterrence," *International Security* 20, No. 3 (Winter 1995/96), 5-42

_____. "Prospects for Chinese Nuclear Force Modernization: Limited Deterrence Versus Multilateral Arms Control," *The China Quarterly*, June 1996, 548-576

_____. "China's Militarized Interstate Dispute Behavior 1949-1992: A First Cut at the Data," *The China Quarterly*, March 1998, 1-30

Kien-hong, Peter Yu. "Taking Taiwan: How would China Set About Recovering the Republic?" *Jane's Intelligence Review*, September 1998, 29-37

Kulkarni, V. G. and Julian Baum. "Biting the Ballot," *Far Eastern Economic Review*, 14 March 1996, 18-19

Lampton, David M. "China: Think Again," *Foreign Policy*, Spring 1998, 15-27

Lewis, John Wilson and Hua Di. "China's Ballistic Missile Programs: Technologies, Strategies, Goals," *International Security* 17, No. 2 (Fall 1992), 5-40

Liang Lihua. "A Political Myth of Multiple Incarnations: The China Threat Theory," *Bejing Dangdai Sichao*, No. 2, 20 April 1998, 57-63, FBIS-CHI-98-167.

Malik, J. Mohan. "China's Policy Towards Nuclear Arms Control," *Contemporary Security Policy* 16, No. 2 (August 1995), 1-43

_____. "The Sources and Nature of Future Conflicts in the Asia-Pacific Region," *Comparative Strategy* (October-December 1997), 33-65

Monk, Paul. "China's Power Trip," *Far Eastern Economic Review*, 21 March 1996, 28

Paul, T.V. "Nuclear Taboo and War Initiation in Regional Conflicts," *Journal of Conflict Resolution* 39, No. 4 (December 1995), 696-717

Roberts, Brad. "Arms Control in the Emerging Strategic Environment," *Contemporary Security Policy* 18, No. 1 (April 1997), 57-82

Roy, Denny. "Hegemon on the Horizon? China's Threat to East Asian Security," *International Security* 19, No. 1 (Summer 1994), 149-168

_____. "The 'China Threat' Issue: Major Arguments," *Asian Survey* 36, No. 8 (August 1996), 758-771

Shambaugh, David. "The PLA's Evolving Doctrine and Threat Perceptions Through 2000," *Journal of Northeast Asian Studies* (Spring 1994), 3-25

Truver, Scott C. "The Threat is Real...And so is the US Navy Theater Ballistic Missile Defense," *Jane's Navy International*, October 1998, 20-28

Waldron, Arthur. "The Art of *Shi*," *The New Republic*, 23 June 1997, 36-41

Whiting, Allen S. "The PLA and China's Threat Perceptions," *The China Quarterly*, June 1996, 596-615

Yin Xingliang. "Missile Threats, Missile Defense," *Aerospace China*, No. 3, 19 March 1998, 34-39, FBIS-CHI-98-204

Wang Yizhou. "A Tentative Analysis of the U. S. Center of Gravity in the Field of International Politics," *American Studies*, No. 1, 5 March 1998, 57-78, FBIS-CHI-98-176

Mi Zhenyu. "Lieutenant General Mi Zhenyu on China's Geostrategy," *China Military Science*, No. 1, February 20, 1998, 6-14, FBIS-CHI-98-208

Newspapers

Beijing Xinhua. (27 April 1998), FBIS-CHI-98-117, "PRC Puts Forward Proposals on Nuclear Disarmament"

_____. (11 June 1998), FBIS-CHI-98-162, "News Analysis: US Right-[Wing] Cold War Rhetoric"

_____. (3 July 1998), FBIS-CHI-98-184, "Jiang Reaffirms PRC Stand on Nuclear Weapons"

Defense News. (30 November-6 December 1998), Barbara Opall-Rome, "Taiwan Resists Call to Embrace TMD...," 4.

Hong Kong Standard. (26 May 1998), Cary Huang, "PRC Deserves Place int 'Big Power Club'"

The New York Times. (10 March 1996), Patrick E. Tyler, "War Games Off Taiwan To Expand, Beijing Says," A12.

_____. (11 March 1998), Patrick E. Tyler, "China Warns U. S. to Stay Out of Taiwan Feud," A6.

Government Documents and Other Sources

Caldera, Andrew L. *Out of the Dragon's Museum: Motivations for PLA Equipment Modernization*, Master's Thesis, Naval Postgraduate School, Monterey, California, June 1998

Commission to Assess the Ballistic Missile Threat to the United States. *Executive Summary of the Report of the Commission to Assess the Ballistic Missile Threat to the United States*, Donald H. Rumsfeld, Chairman. 104th Congress. 15 July, 1998.

FitzSimonds, James. Presentations on "Evolving Threats and the Revolution in Military Affairs," Naval Postgraduate School, Monterey, California, 9-10 November, 1998

Gill, Bates. Presentation on "China and the RMA," Naval Postgraduate School, Monterey, CA, 19 November, 1998.

Greenburg, James R. *Theater Ballistic Missile Defense: New United States Strategic Requirements and the ABM Treaty*, Master's Thesis, Naval Postgraduate School, Monterey, California, December 1995

Kan, Shirley A. "China's Compliance with Nonproliferation Commitments," Speech delivered on 21 January, 1998 before the Nonproliferation Policy Forum on US-China Nuclear Cooperation

Keenan, Joseph M. *Overcoming the ABM Treaty: Paths to National Missile Defense*, Master's Thesis, Naval Postgraduate School, Monterey, California, June 1998

Montaperto, Ronald N. *Reality Check: Assessing the Chinese Military Threat*, Progressice Policy Institute Defense Working Paper No. 4, edited by Steven J. Nider, April 1998. Available at http://www.dlcppi.org/library.html-ssi; accessed 18 November 1998

Peterson, Joseph Preston. *Theater Missile Defense: Beyond Patriot?* Master's Thesis, Naval Postgraduate School, Monterey, California, June 1994.

Sutter, Robert G. *Theater Missile Defense: Possible Chinese Reactions; U. S. Implications, and Options*, Congressional Research Service Report 94-154S, 23 February 1994.

_____. *Chinese Nuclear Weapons and Arms Control Policies: Implications and Options for the United States*, Congressional Research Service Report 94-422S, 25 March 1994.

United States Department of Defense. Ballistic Missile Defense Organization. *1997 Report to the Congress on Ballistic Missile Defense*; this and subsequent BMDO documents available at http://www.acq.osd.mil/bmdo/bmdolink/html/bmdolink.html.

_____. Ballistic Missile Defense Organization. "Ballistic Missile Defense — The Core Programs", BMDO Fact Sheet 97-05.

_____. Ballistic Missile Defense Organization. "U.S. Ballistic Missile Defense Program Focus", BMDO Fact Sheet 97-15.

_____. Ballistic Missile Defense Organization. "Navy Area Ballistic Missile Defense Program", BMDO Fact Sheet 97-18.

_____. Ballistic Missile Defense Organization. "Navy Theater Wide Ballistic Missile Defense Program", BMDO Fact Sheet 97-19.

_____. Ballistic Missile Defense Organization. "National Missile Defense Program Evolution", BMDO Fact Sheet JN 98-04.

_____. Ballistic Missile Defense Organization. "National Missile Defense Program", BMDO Fact Sheet JN 98-05.

_____. Ballistic Missile Defense Organization. "National Missile Defense Program Architecture", BMDO Fact Sheet JN 98-06.

United States Government Accounting Office. *National Security: Impact of China's Military Modernization in the Pacific Region*, Washington, D.C., June 1995.

Welch, Thomas. Presentation on Net Assessment and the Trends in Future Warfare, Naval Postgraduate School, Monterey, CA, 24 November, 1998.

Zimmerman, Peter D. *Missile Defense and American Security: A Sensible National Policy*, edited by Robert A. Manning, Progressive Policy Institute Defense Working Paper No. 2, May 1996; available at http://www.dlcppi.org/library.html-ssi; accessed 18 November 1998.

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